

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 22, 2004, 17:06:13 ; Search time 109 Seconds  
(without alignments)  
9418.891 Million cell updates/sec

Title: US-09-668-482-3  
Perfect score: 1850  
Sequence: 1 TGTGCGCGTGTGTCGCGTT.....GTTCTTACAAAAA 1850

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA: \*  
1: /cgn2\_6/prodata/2/ina/5A COMB.seq: \*  
2: /cgn2\_6/prodata/2/ina/5B COMB.seq: \*  
3: /cgn2\_6/prodata/2/ina/6A COMB.seq: \*  
4: /cgn2\_6/prodata/2/ina/6B COMB.seq: \*  
5: /cgn2\_6/prodata/2/ina/PCUS COMB.seq: \*  
6: /cgn2\_6/prodata/2/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1850	100.0	1850	3	US-08-724-466B-3
2	1850	100.0	1850	4	US-08-882-164D-3
3	625.4	33.8	1725	4	US-08-882-164D-31
4	608.6	32.9	1494	3	US-08-724-466B-5
5	608.6	32.9	1494	4	US-08-882-164D-5
6	297.8	16.1	337	3	US-08-724-466B-1
7	297.8	16.1	337	4	US-08-882-164D-1
8	175.6	9.5	351	3	US-08-724-466B-11
9	175.6	9.5	351	4	US-08-882-164D-11
10	170	9.2	4164	4	US-08-882-164D-38
11	124.4	6.7	2677	4	US-08-882-164D-36
12	72	3.9	683	4	US-08-882-164D-37
13	69.4	3.8	1192	4	US-09-583-447A-9
14	69.4	3.8	1633	4	US-09-583-447A-7
15	69.4	3.8	1659	4	US-09-583-447A-1
16	69.4	3.8	1973	4	US-09-583-447A-11
17	68.2	3.7	1512	4	US-08-277-031B-4
18	68.2	3.7	2759	4	US-09-144-367-1
19	67.8	3.7	1608	4	US-08-622-166A-1
20	65	3.5	2059	4	US-09-023-655-1062
21	60.8	3.3	3755	4	US-09-302-620B-87
22	60.8	3.3	3755	4	US-09-912-161-9
23	60.8	3.3	3948	4	US-09-302-620B-86
24	60.8	3.3	3948	4	US-09-912-161-8
25	60.8	3.3	3948	4	US-09-911-781-1
26	59.6	3.2	1515	4	US-09-583-447A-3
27	58	3.1	319	4	US-08-882-164D-35

C	28	58	3.1	7218	1	US-08-232-463-14	Sequence 14, Appl
C	29	53.8	2.9	531	4	US-09-583-447A-36	Sequence 36, Appl
	30	53.8	2.9	1349	4	US-09-583-447A-5	Sequence 5, Appl
	31	53.4	2.9	1762	3	US-09-292-768-63	Sequence 63, Appl
	32	52.6	2.8	3668	4	US-09-302-620B-89	Sequence 89, Appl
	33	52.6	2.8	3668	4	US-09-912-161-11	Sequence 11, Appl
	34	51.8	2.8	1762	3	US-08-881-784-5	Sequence 5, Appl
	35	51.8	2.8	1762	3	US-09-292-768-1	Sequence 1, Appl
	36	51.8	2.8	1762	3	US-09-292-768-65	Sequence 65, Appl
	37	50.6	2.7	1707	4	US-09-023-655-1060	Sequence 1060, Ap
	38	50.2	2.7	1762	3	US-09-172-339-5	Sequence 5, Appl
	39	48.2	2.6	804	4	US-09-464-535-29	Sequence 29, Appl
	40	47.8	2.6	3900	4	US-09-302-620B-88	Sequence 88, Appl
	41	47.8	2.6	3900	4	US-09-912-161-10	Sequence 10, Appl
	42	46	2.5	1746	1	US-08-201-118-2	Sequence 2, Appl
	43	46	2.5	1746	2	US-08-238-821B-2	Sequence 2, Appl
	44	46	2.5	1746	4	US-09-023-655-1059	Sequence 1059, Ap
	45	46	2.5	1746	5	PCT-US95-05744-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1  
US-08-724-466B-3  
; Sequence 3, Application US/08724466B  
; Patent No. 6063606  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; ZIP: M5L 1A9  
; COUNTRY: Canada  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/724,466B  
; FILING DATE: October 1, 1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00004  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1850 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-724-466B-3

Query Match 100.0%; Score 1850; DB 3; Length 1850;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1850; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 TGTGCGCGTGTGTCGCGTTCTCTCTCCAGAGCTGTTTTTCG 60  
Db 1 TGTGCGCGTGTGTCGCGTTCTCTCTCCAGAGCTGTTTTTCG 60  
Qy 61 TTTTGGCGATCAGTTGCGCGCTTCAACATGGGGCTGTACACCTTATGGTCACCTTCTC 120

Db 61 TTTTGGGATGATGCGGCTTCAACATGGGGCTGACACCTTATGGTCACTTCTC 120  
 QY 121 TGCACCATCGTCTACCGCTTTTACTCTTTCTCGCGCGGTGAAGTTGTGGAGATGTTA 180  
 Db 121 TGCACCATCGTCTACCGCTTTTACTCTTTCTCGCGCGGTGAAGTTGTGGAGATGTTA 180  
 QY 181 ATGATCCGACGAGTGCATCCGACATGCGAAGTCTCTACCGCGAGGTACGATGGGCTTG 240  
 Db 181 ATGATCCGACGAGTGCATCCGACATGCGAAGTCTCTACCGCGAGGTACGATGGGCTTG 240  
 QY 241 CCGTTCATTTGAGAAACGCTCCAGCTGATCTCCAGAGAAGGAAGTTTCTGCGCATGAAA 300  
 Db 241 CCGTTCATTTGAGAAACGCTCCAGCTGATCTCCAGAGAAGGAAGTTTCTGCGCATGAAA 300  
 QY 301 CGGCAAGAAATACGGGTGATCTACAGACGCAACCTTTCCGGAAACCGACTGTCAGGGTG 360  
 Db 301 CGGCAAGAAATACGGGTGATCTACAGACGCAACCTTTCCGGAAACCGACTGTCAGGGTG 360  
 QY 361 ATGGAGCTGATATGAGGAGATCTGCTGGGCGCAACACAGCTGGTGTCTGTTCAG 420  
 Db 361 ATGGAGCTGATATGAGGAGATCTGCTGGGCGCAACACAGCTGGTGTCTGTTCAG 420  
 QY 421 TGGCCAGCATCAGTGAAGACCATCTCGGCTCTGACACCTCTTCCAAATGTCATGGAGTT 480  
 Db 421 TGGCCAGCATCAGTGAAGACCATCTCGGCTCTGACACCTCTTCCAAATGTCATGGAGTT 480  
 QY 481 CACACAAAAACAGAAAAAGGCCATATGAGGGCTTCTCGAGATGTCCTGAGAGCAC 540  
 Db 481 CACACAAAAACAGAAAAAGGCCATATGAGGGCTTCTCGAGATGTCCTGAGAGCAC 540  
 QY 541 TACATTCGCTGATCCAGAGAGGTGAAGAGCGCCATACAGGAATGGCTGCAAAAGAC 600  
 Db 541 TACATTCGCTGATCCAGAGAGGTGAAGAGCGCCATACAGGAATGGCTGCAAAAGAC 600  
 QY 601 TCCTGCGTCTGTTTATCCAGAAATGAAGAAATCTATGTTTCGATAGCTATGAGAATC 660  
 Db 601 TCCTGCGTCTGTTTATCCAGAAATGAAGAAATCTATGTTTCGATAGCTATGAGAATC 660  
 QY 661 CTGCTTGGTTTGAACAGAGCAATTAAGAGCGAGCAGAGAGACTGGTGGAGCTTTT 720  
 Db 661 CTGCTTGGTTTGAACAGAGCAATTAAGAGCGAGCAGAGAGACTGGTGGAGCTTTT 720  
 QY 721 GAGGAATGATCAAAACCTTGTCTCTGCAATCGACCTCTTCAGTGTCTGTAC 780  
 Db 721 GAGGAATGATCAAAACCTTGTCTCTGCAATCGACCTCTTCAGTGTCTGTAC 780  
 QY 781 AGGGTTTGAAGGCGACGCAATTTCACTCACTCAAAATTCAGGAAGCAATCAGGAAGAA 840  
 Db 781 AGGGTTTGAAGGCGACGCAATTTCACTCACTCAAAATTCAGGAAGCAATCAGGAAGAA 840  
 QY 841 ATTCAGATGACGACATGAAGAAAGCAAGCAAGAAATACAGAGCGCTTCACTGTTGATC 900  
 Db 841 ATTCAGATGACGACATGAAGAAAGCAAGCAAGAAATACAGAGCGCTTCACTGTTGATC 900  
 QY 901 GAGAACAGAGAGAGTGAAGACCTTTTGTGTTGAGGCGATGAAGAGAGAGTAC 960  
 Db 901 GAGAACAGAGAGAGTGAAGACCTTTTGTGTTGAGGCGATGAAGAGAGAGTAC 960  
 QY 961 GAGTTCATTTGAGAGTCAATGAACACCGCGAGCACTGCAACCTCTCTGTCAATGTTT 1020  
 Db 961 GAGTTCATTTGAGAGTCAATGAACACCGCGAGCACTGCAACCTCTCTGTCAATGTTT 1020  
 QY 1021 CTGGGCTGACACAGAGTGTGCGAGAGGTGACAGAGGCTTCAGAGAGGTTGAA 1080  
 Db 1021 CTGGGCTGACACAGAGTGTGCGAGAGGTGACAGAGGCTTCAGAGAGGTTGAA 1080  
 QY 1081 ATGGCATGTATACACCTTGAAGAGGCTTGAATGAGCTGTTGACAGCTGAAGTAC 1140  
 Db 1081 ATGGCATGTATACACCTTGAAGAGGCTTGAATGAGCTGTTGACAGCTGAAGTAC 1140  
 QY 1141 ACTGGATGTGTATTAAGAGACTCTTAGAATCAACCTCTCTTCCCGGAGGATTCAGA 1200

Db 1141 ACTGGATGTGTATTAAGAGACTCTTAGAATCAACCTCTCTTCCCGGAGGATTCAGA 1200  
 QY 1201 GTCCACTCAAAACCTTTGAATTTGAATGTTTACCAAAATCTCTAAAGGATGGAACGTCAAT 1260  
 Db 1201 GTCCACTCAAAACCTTTGAATTTGAATGTTTACCAAAATCTCTAAAGGATGGAACGTCAAT 1260  
 QY 1261 TACAGCATCTGTGACAGCGAGATGTGGCGAGCTCTTCCAAACAAAGAGAGGATTCAG 1320  
 Db 1261 TACAGCATCTGTGACAGCGAGATGTGGCGAGCTCTTCCAAACAAAGAGAGGATTCAG 1320  
 QY 1321 CCGGAGAGATTCATCAGCAAGGTCTGAGAGACGGTCCAGGTTTAACTACATCCCTTC 1380  
 Db 1321 CCGGAGAGATTCATCAGCAAGGTCTGAGAGACGGTCCAGGTTTAACTACATCCCTTC 1380  
 QY 1381 GGAGAGAGATTCAGATGTGTGGGCAAGAGTTGCCAAAGTGTACTCAAGATCTTT 1440  
 Db 1381 GGAGAGAGATTCAGATGTGTGGGCAAGAGTTGCCAAAGTGTACTCAAGATCTTT 1440  
 QY 1441 TTAGTTGAGTTAACCGAGCATTCGAAATGGATTTCTCTCAACGGACCCCGCAATGAAA 1500  
 Db 1441 TTAGTTGAGTTAACCGAGCATTCGAAATGGATTTCTCTCAACGGACCCCGCAATGAAA 1500  
 QY 1501 ACAGGCGGACATTTTACCCAGTGGACATCTCCCTACCAAAATCACTAGTTATGT 1560  
 Db 1501 ACAGGCGGACATTTTACCCAGTGGACATCTCCCTACCAAAATCACTAGTTATGT 1560  
 QY 1561 AATTAGCTTAAACGAGCTTTGTACATGTTTATTTAGATGACCTGTGATGTTG 1620  
 Db 1561 AATTAGCTTAAACGAGCTTTGTACATGTTTATTTAGATGACCTGTGATGTTG 1620  
 QY 1621 CATATTTTCTATTTTATTTATATAAAGCAGATGTGTATATAAGTCTATCGGAGGACGA 1680  
 Db 1621 CATATTTTCTATTTTATTTATATAAAGCAGATGTGTATATAAGTCTATCGGAGGACGA 1680  
 QY 1681 AAACGAGGACACTTCTTCATGGATCACTGTAATGCTACAGAGTGTGTGTATATA 1740  
 Db 1681 AAACGAGGACACTTCTTCATGGATCACTGTAATGCTACAGAGTGTGTGTATATA 1740  
 QY 1741 TTTATATGATGTGTGTATATAGCTTTTGTACTGTATGCACTTATTAACCTGCTCT 1800  
 Db 1741 TTTATATGATGTGTGTATATAGCTTTTGTACTGTATGCACTTATTAACCTGCTCT 1800  
 QY 1801 TTATCTCATCGGTTTATTTTAAATAAACATGTTCTTACAAAAA 1850  
 Db 1801 TTATCTCATCGGTTTATTTTAAATAAACATGTTCTTACAAAAA 1850

RESULT 2  
 US-08-882-164D-3  
 ; Sequence 3, Application US/08882164D  
 ; Patent No. 6306624  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
 ; APPLICANT: Beckett, Barbara R., Jones, Glenville  
 ; TITLE OF INVENTION: Retinoid Metabolizing Protein  
 ; NUMBER OF SEQUENCES: 43  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Blake, Cassels & Graydon  
 ; STREET: Box 25, Commerce Court West  
 ; CITY: Toronto  
 ; STATE: Ontario  
 ; COUNTRY: Canada  
 ; ZIP: M5L 1A9  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
 ; COMPUTER: COMPAQ, IBM PC compatible  
 ; OPERATING SYSTEM: MS-DOS 5.1  
 ; SOFTWARE: WORD PERFECT  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/882,164D  
 ; FILING DATE: June 25, 1997  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 08/667,546

Qy	781	AGGGTTTGAGGCGACGCAATTTTCATCTCACTCCAAATTTGAGGAAACATCAGGAGGAAA	840
Db	781	AGGGTTTGAGGCGACGCAATTTTCATCTCACTCCAAATTTGAGGAAACATCAGGAGGAAA	840
Qy	841	ATTCAAGATGACGACAAATGAAACGAAACAGAAATACAAAGAAGCCCTTCAGCTGTGATC	900
Db	841	ATTCAAGATGACGACAAATGAAACGAAACAGAAATACAAAGAAGCCCTTCAGCTGTGATC	900
Qy	901	GAGAACGCGAAGAAAGTGAGCAACCTTTTAGTTTGCAGGCGATGAAAGACGACTACA	960
Db	901	GAGAACGCGAAGAAAGTGAGCAACCTTTTAGTTTGCAGGCGATGAAAGACGACTACA	960
Qy	961	GAGCTTCTATTTCGAGGTCATGAAACCCAGCGACAGCTGCAAACTCACTTGTCAATGTTT	1020
Db	961	GAGCTTCTATTTCGAGGTCATGAAACCCAGCGACAGCTGCAAACTCACTTGTCAATGTTT	1020
Qy	1021	CTGGGCTGTGAACACGAAGTGGTGAGAAAGGTCAGAGAGAGGTTTCAGGAAAGGTTGAA	1080
Db	1021	CTGGGCTGTGAACACGAAGTGGTGAGAAAGGTCAGAGAGAGGTTTCAGGAAAGGTTGAA	1080
Qy	1081	ATGGGCGATGTATACACTGGAAAGGGCTTGAGTATGAGCTGTGGACAGCTGGAAGTAC	1140
Db	1081	ATGGGCGATGTATACACTGGAAAGGGCTTGAGTATGAGCTGTGGACAGCTGGAAGTAC	1140
Qy	1141	ACTGGATGTGTGATTAAGAGACTCTTAGAATCAACCTCTGTTCCCGGAGGATTCAGA	1200
Db	1141	ACTGGATGTGTGATTAAGAGACTCTTAGAATCAACCTCTGTTCCCGGAGGATTCAGA	1200
Qy	1201	GTGCGACTCAAAACCTTTGAATGTGATGTTTACAAATTCCTTAAGAGNATGGAAGCTCAAT	1260
Db	1201	GTGCGACTCAAAACCTTTGAATGTGATGTTTACAAATTCCTTAAGAGNATGGAAGCTCAAT	1260
Qy	1261	TACGACATCTGTGACACGACGATGTGGCGGACGCTCTTTCCAAAACAAAGAGAGGTTCCAG	1320
Db	1261	TACGACATCTGTGACACGACGATGTGGCGGACGCTCTTTCCAAAACAAAGAGAGGTTCCAG	1320
Qy	1321	CCGGAGAGATTCATGAGCAAAAGGCTGTGGAGGACGGGTCAGGTTTAACTCAAGATCTTT	1380
Db	1321	CCGGAGAGATTCATGAGCAAAAGGCTGTGGAGGACGGGTCAGGTTTAACTCAAGATCTTT	1380
Qy	1381	GGAGGAGATCCGAGATGTGTGGGCAAGAGTTCGGCAAAGTGTTACTCAAGATCTTT	1440
Db	1381	GGAGGAGATCCGAGATGTGTGGGCAAGAGTTCGGCAAAGTGTTACTCAAGATCTTT	1440
Qy	1441	TTAGTTTGAGTTAACCGACGCAATGCAATTTGGATTTCTCTCAACGGACCCCGCAATGAAA	1500
Db	1441	TTAGTTTGAGTTAACCGACGCAATGCAATTTGGATTTCTCTCAACGGACCCCGCAATGAAA	1500
Qy	1501	ACAGGCCGCACTATTATCCAGTGGAACATCTCCCTACCAAAATTCACCTAGTTATGTCAGA	1560
Db	1501	ACAGGCCGCACTATTATCCAGTGGAACATCTCCCTACCAAAATTCACCTAGTTATGTCAGA	1560
Qy	1561	AATTTAGCTTAACCGGAGCTTTCTACATATGTTTTTATTTTAGATGAACGTGTGATGTTTG	1620
Db	1561	AATTTAGCTTAACCGGAGCTTTCTACATATGTTTTTATTTTAGATGAACGTGTGATGTTTG	1620
Qy	1621	GATATTTTCTATTTTGTATTATAAAGACAGATGTGTATATATAGCTCTATGCGAGAGACGA	1680
Db	1621	GATATTTTCTATTTTGTATTATAAAGACAGATGTGTATATATAGCTCTATGCGAGAGACGA	1680
Qy	1681	AAACGAGGCGACTACTTTCTCATGTGATCACTGTATGCTACAGAGTGTCTGTGATGTATA	1740
Db	1681	AAACGAGGCGACTACTTTCTCATGTGATCACTGTATGCTACAGAGTGTCTGTGATGTATA	1740
Qy	1741	TTTATATATGTAGTTGTCTTATATAGCTTTTGTACTGTATGCAACTTATTTAACTCGCTCT	1800
Db	1741	TTTATATATGTAGTTGTCTTATATAGCTTTTGTACTGTATGCAACTTATTTAACTCGCTCT	1800
Qy	1801	TTATCTCATGGGTTTTATTTTAATAAACAATGTTTCTCAAAAAAAAAAAAAA	1850
Db	1801	TTATCTCATGGGTTTTATTTTAATAAACAATGTTTCTCAAAAAAAAAAAAAA	1850

## RESULT 3

US-08-882-164D-31  
; Sequence 31, Application US/08882164D  
; Patent No. 6306624  
; GENERAL INFORMATION:  
; APPLICANT: Pekovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 43  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5L 1A9  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,164D  
; FILING DATE: June 25, 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; APPLICATION NUMBER: 08/724,466  
; FILING DATE: October 1, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00010  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 31:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1725 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear

US-08-882-164D-31

Query Match 33.8%; Score 625.4; DB 4; Length 1725;  
Best Local Similarity 65.5%; Pred. No. 1e-185;  
Matches 965; Conservative 0; Mismatches 496; Indels 12; Gaps 3;  
QY 87 CATGGGCTGTACACCCCTTATGTGTCACCTTCTCTGCACCATCGTGCTACCCGTTTACT 146  
DB 24 CATGGGCTCCCGGCGCTGTGGCGAGTCGGCTGTGCACCTTCTGCTGCGCGTGTGT 83  
QY 147 CTTTCTGCGCGCGTGAAGTTGTGGGAGATGTTAATGATCCGACGAGTCGATCCGAAC 206  
DB 84 CTTCTGCGCGCGCTCAAGCTCTGGACCTGTACTGTGTGAGCAGCGCGATCGAGCTG 143  
QY 207 CAGAGTCTCTACCGCAGGTACATGGGCTTGCCTTCATTGGAGAAAGCTCCAGCT 266  
DB 144 CGCCTCCCTCTGCCCCCGGATACATGGGCTTCCCATCTTTGGGAAAACATTCAGAT 203  
QY 267 GATCCTCCAGAGAGGAAGTTCTCTGCGCATGAAACGGCAGAAATACGGGTGCATCTACAA 326  
DB 204 GGTCTCTCAGCGAGAGATTTCTGAGATGAGCGAGGAAATACGGCTTCATCTACAA 263  
QY 327 GACGACCTCTTGGGAAACCGACTGTGAGGTGATGGAGCTGATTAATGTGAGCGAGAT 386  
DB 264 GACGCACTCTTTGGGCGGCCACCGGTGCGGTGATGGGCGGATTAATGTGCGGCGCAT 323  
QY 387 TCTGCTGGGGAACACAGCTGTGTCTCTCAGTGCCGAGCATCAGTGAGAACCATCCT 446  
DB 324 CTTGCTGGGAGACACCGGTTGGTGTGCGTGCACTGGCGCGCGTGGTGGCACCATCTCT 383

QY 447 GGGCTCTGACACCTCTCCAAATGTCATGAGTTCAACACAAACAAAGAAAGGCCAT 506  
DB 384 GGGGCTGGCTGCTCTCCAACTTCGACGATTCCTCGCAAGACGCGAAAGAGGTGAT 443  
QY 507 TATGAGGCGGTTCTCTCGAGATCTCTGGAGCACTACATTCCTCGTGATCCAGCAGGAGGT 566  
DB 444 TATGAGGCGGTTCTCGAGGCTTCAGCGCGGAGGCACTCCAGTCTGCTGCTGATCGTGAGGAAGT 503  
QY 567 GAGAGGCGCATACAGGAATGGTGCAGAAAGACTCTCGG---TCTGTTGTTATCCAGA 523  
DB 504 CAGCAGTTCTCTGGAGCAGTGGCTAAGCTGGGGGAGCGGCGCTCTGGTCTACCCCGCA 563  
QY 624 AATGAGAAATCTCATGTTTCGGATAGCTATGAGAAATCCTCTGTTGTTTGA-----ACC 677  
DB 564 GGTGAGCGGCTCATGTTTCGGCATCGCATGGCATCTCTGCTGGGCTCGGAGCGGGTCC 623  
QY 678 AGAGCAAAATAAGACGAGACGAGCAAGAACTGGTGGAGCTTTTGGAGAAATGATCAAAA 737  
DB 624 AGCGGCGGCGGAGGAGGAGCAACAGCTCTGTGGAGGCTTCGAGGAGATGACCCGCAA 683  
QY 738 CTTGTTCTCTTGGCCAATCGACGTTCTCTTCAGTGTCTGTACAGGGGTTTGGGGCAGG 797  
DB 684 TCTCTCTCTCTCTCCCATTCGACGTGCCCTTTAGCGGCTGTACCGGGGCGTGAAGGCGG 743  
QY 798 CAATTCATTCACTCCMAAATTGAGGAAACAT---CAGGAAGAAATTCAGATGACGA 854  
DB 744 GAACCTTATACAGCGCGCATCGAGGAGAACATTCGCGCCAAGATCCGCGGCTTCAGGC 803  
QY 855 CAATGAAACGAAACAGAAATACAAAGACGCCCTTCAGCTGTTGATCGAGAACACAGAG 914  
DB 804 TACAGACCGGATGGGGTTTCAAGGACGCGTGCAGCTCTCTGATTGAGCACTCGTGGGA 863  
QY 915 AAGTGACGAACTTTTAGTTTGCAGGCGGATGAAGAGAGCACTACAGAGCTTCTATTGG 974  
DB 864 GAGGGAGAGAGCTGGGATATGAGGCACTAAACATTCCTCAACAGAGCTCTCTTTGG 923  
QY 975 AGTCAATGAAACACCGCGAGCACTCAACCTCACTCTGTCTCATGTTTCTGGGTCTGAAAC 1034  
DB 924 TGGTCAATGAACTACAGCCAGTGTGGGACATCACTGATCACTTACCTAGGACTCTACCC 983  
QY 1035 AGAAGTGGTCAGAGGTCAGAGGAGGTTTCAGGAAGAGTTGAATGGGCGATGTATAC 1094  
DB 984 ACATGCTCTCCAGAAAGTTTCAGAGAGATAAAGCAAGGGGCTTACTTTCCAGAGACAA 1043  
QY 1095 ACCTGGAAGGGCTTGAGTATGGAGCTGTGGACAGCTGAAGTACATCTGGATGTGTAT 1154  
DB 1044 TCAAGACACAGATTAGACATGGAACCTTTGGAACAGCTTAATATCATTTGGTGTGAT 1103  
QY 1155 TAAAGAGACTCTTAGAATCAACCCCTCTGTTCCCGAGGATTCAGAGTCGCACTCAAAAC 1214  
DB 1104 TAAAGAGACCTGCGATTTGAATCTCCGGTTCAGAGGGGTTTCGGGTTGCTCTGAAGAC 1163  
QY 1215 CTTTGAATGAATGTTACGAATTCCTTAAGATGGAAGCTCATTTACAGCCTCTGGA 1274  
DB 1164 TTTTGAGCTGAATGATACCAGATCCCAAGGGCTTGAATGTTATTTACGATATCTGGA 1223  
QY 1275 CAGCAGATGTGGCGAGCTTCTTCCAAACAAAGAGAGTTCAGCGCGGAGAGATTCAT 1334  
DB 1224 CACCCACATGTGGCAGATATCTTCACTAACAGAGGAAATTAATCCCGACCGCTTAT 1283  
QY 1335 GAGCAAGGTTGGAGGAGCGGTCCAGGTTAACTAATCCCTTCGAGGAGGATCCAG 1394  
DB 1284 AGTGCTCATCCAGAGGATGCTCCCGGTTTCAGTCTTCAATTCATTTGGAGGAGCGCTTCG 1343  
QY 1395 GATGTGTGGGCAAGAGTTTCGCCAACTGTACTCAGATCTTTTAGTTGATTTAAC 1454  
DB 1344 GAGCTGTGTAGGCAAGAGTTTGCAGAAATCTCTTAAGATATTTACAGTGGAGCTGGC 1403  
QY 1455 GCAGCATTTGAAATGATTTCTTCAACAGGACCCCGACCAATGAAACAGGCCGACTAT 1514  
DB 1404 TAGGCACTGTGTTGGAGCTTCTTAATGCACTCTTACATGAGACAGGCCACTGT 1463  
QY 1515 TTACCCAGTGGACAAATCTCCCTACCAAAATTCAC 1547

Db 1464 GTACCCCTGTGGACAACTCCCTGCRAGATTAC 1496

## RESULT 4

US-08-724-466B-5  
; Sequence 5, Application US/08724466B  
; Patent No. 6063606  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; ZIP: M5L 1A9  
; COUNTRY: Canada  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/724,466B  
; FILING DATE: October 1, 1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00004  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1494 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-724-466B-5

Query Match 32.9%; Score 608.6; DB 3; Length 1494;  
Best Local Similarity 64.7%; Pred. No. 1.7e-180;  
Matches 956; Conservative 0; Mismatches 509; Indels 12; Gaps 3;

QY 88 ATGGGGCTGTACACCTTATGCTACCTTCTGTGACCATCGTGTACCGTTTACTC 147  
Db 1 ATGGGGCTCCCGGCTGTGGCCAGTGGCTCTGACCTTCTGTGCTGGCGTGTCTC 60  
QY 148 TTCTCGCGCGGTGAAGTTGTGGAGATGTTAATGATCCGAGTGTATCCGAATGC 207  
Db 61 TTCTGGCTGGATCAAGCTCTGGGACCTGTACTGTGCGGCGCGACCCAGTTGT 120  
QY 208 AGAAGTCTCTACGCCAGGTACCATGGGCTTCCGTTTATTGGAGAAAGCTCCAGCTG 267  
Db 121 GCCTCCATTTGCCCGCGGACTATGGGCTTCCCTTCTTTGGGAAACCTTGCAGATG 180  
QY 268 ATCTCCAGAGAGAGTTTCTGCGCATGAACGGCAGAAATACGGTGTACTACAG 327  
Db 181 GTACTGACGGAGAGTTCTTCGATGTAAGCGGAGGAAATACGGTCTCATACAG 240  
QY 328 ACGCACTCTTCGGGAACCGGACTGTCAAGGTGTATGGAGCTGATAATGTGAGGCGAGATT 387  
Db 241 ACGCATCTCTTCGGGCGGCCACCGTACGGGTGATGGCGGACAAATGTGCGGCGCATC 300  
QY 388 CTGCTGGGCGAACACAAAGCTGGTGTCTGATGGCGAGCATCAGTGAGAACCATCTCTG 447  
Db 301 TTGCTCGGAGACGACCGGCTGGTGTGGTCCACTGGCGAGCGCTGGCGCACCATCTG 360

QY 448 GGCTCTGACACCTCTCCCAATGTCTCATGGAGTTTCAACAAAAAAGAGAGGCATT 507  
Db 361 GGATCTGGCTGCTCTCTTAACCTGCACTCTCTCGCAACAGAGCGCAGAGAGTGATT 420  
QY 508 ATGAGGGGCTTCTCTGAGATGCTCTGAGACACTACATTTCCGTTGATCCAGCAGAGGTG 567  
Db 421 ATGGGGGCTTTCAGCGCGGAGGCACTCGAATGCTAGTTCGCGGTGATCACCGAGAGGTG 480  
QY 568 AAGAGGGGCATACAGAAATGGCTG---CAAAAAGACTCTCTGCTGCTGTTTATCCAGAA 624  
Db 481 GGCAGCAGCTTGGAGCAGTGGCTGAGTGGCGGAGCGCGCTCTCTGGTCTTACCCCGAG 540  
QY 625 ATGAAGAAACTCAATTTTCGGATAGCTATGAGAACTCTCTTGTGTTTGAAC-----A 678  
Db 541 GTGAGCGCTCATGTTCCGAATCGCATCGCATCTTACCTGGGCTGGAACCCCACTG 600  
QY 679 GAGCAAAATAAAGACGAGCAAGAACTGGTGGAAAGCTTTTGAGGAAATGATCAAAAC 738  
Db 601 GCGGGCGACGGGACTCCGAGCAGCAGCTTGTGGAGGCTTCGAGGAAATGACCCGCAAT 660  
QY 739 TTGTTCTCTTGGCAATCGACCTTCTTCACTGCTCTGACAGGGTGTGAGGGCAGCG 798  
Db 661 CTCTTCGCTGCCCATCGACGTGCTTACCGGGGCTGTACCGGGGCAAGAGGGCGCG 720  
QY 799 AATTTCATTCACTCCAAAATTTGAGGAAACATCAGGAGAAATTTCAAG---ATGACGAC 855  
Db 721 AACTCATTTACGGCGGCTCGAGCAGAACTTCGCGCCAGATCTCGGGCTCGGGCA 780  
QY 856 AATGAAACGAAACGAAATAAAGAGCGCTTCAAGAGCTTGTGATCGAGAACAGCAAGA 915  
Db 781 TCGAGGGGCGCAGGGCTGCAAGACGCGCTGTGATCGAGCACTGTGGGAG 840  
QY 916 AGTGAAGAACCTTTAGTTTTCAGGGGATGAAGAGCAGCTACAGAGCTTCTATTGCA 975  
Db 841 AGGGGAGAGCGGCTGGACATGCGAGCACTAAGCAATCTTCAACCGAATCTCTTTGA 900  
QY 976 GGTCAATGAACCCAGCGCAGCACTGCAACCTCACTTGTCTCATGTTTCTGGTGTGAACA 1035  
Db 901 GGACACGAAACCCAGCGCAGCTGCGACCATCTCTGATCACTTACCTGGGCTCTACCCA 960  
QY 1036 GAAGTGTGTCAGAGGTCAGAGAGAGGTTGAGAGAGGTTGAAATGGGCAATGATACA 1095  
Db 961 CATGTTCTCCAGAAAGTCGAGAGAGCTGAAGAGTAAAGGTTTACTTTGCAAGCAAT 1020  
QY 1096 CCTGGAAGGGCTTACGATGAGAGCTGTGGACAGCTGAAGTACACTGGAATGTGATT 1155  
Db 1021 CAAGACAAAGATTGGACATGGAAATTTTGAACAACTTAATATACATCGGGTGTGTTAT 1080  
QY 1156 AAAGAGACTCTTTAGAAATCAACCTCTCTGTTCCCGAGGATTCAGAGTCGCACTCAAAAC 1215  
Db 1081 AAGGAGACCTTTCGACTGAATCCCGAGTTCCAGGAGGGTTTCGGGTTGCTCTGAAGACT 1140  
QY 1216 TTGAAATTAATGGTTACCAATTTCTTAAGATGGAAGTCACTTACAGCATCTGTGAC 1275  
Db 1141 TTTGAATTAATGGATCCAGATTTCCAAAGGGCTGGAATGTTATCTACAGTATCTGAT 1200  
QY 1276 ACGCAGATGTGGCGAGCTTTTCCAAACAAAGAGAGTTCCAGCCGAGAGATTCTG 1335  
Db 1201 ACTCATGATGTGGCAGAGATCTTCAACACAGAGAGAAATTAATCTCTGACCGATTCA 1260  
QY 1336 AGCAAAAGTCTGGAGAGCGGTTCCAGGTTTAACTACATPCCCTTCGAGAGAGGATCCAGG 1395  
Db 1261 GCTCCTCACCCAGAGGATGCAATCCAGTTTCACTTCAATTTGGAGGAGGCTTTAGG 1320  
QY 1396 ATGTGTGGGCAAGAGTTCCGCAAGTGTACTCAAGTCTTTTATGTTGATTGATTAAG 1455  
Db 1321 AGCTGTGTAGGCAAGAAATTTGCAAAATTTCTCTCAAAATATTTTACAGTGGAGCTGGCC 1380  
QY 1456 CAGCATTCGAATTTGATTTCTCAAAACGAGCCCGCAATGAAACAGGCGCCGACTATT 1515  
Db 1381 AGGATTTGATCTGGCAGCTTCTTAATGAGACCTCTTACATGAAACACGATCCACCGCTG 1440  
QY 1516 TACCCAGTGGCAATCTCCCTTACCAAAATTTCACTAGTT 1552

Db 1441 TATCTGTGGACAATCTCCCTGCAAGATTCACCCATT 1477

RESULT 5

US-08-882-164D-5

; Sequence 5, Application US/08882164D  
; Patent No. 6306624  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 43  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5L 1A9

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,164D  
; FILING DATE: June 25, 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; APPLICATION NUMBER: 08/724,466  
; FILING DATE: October 3, 1996

; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00010  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1494 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear

US-08-882-164D-5

Query Match 32.9%; Score 608.6; DB 4; Length 1494;

Best Local Similarity 64.7%; Pred. No. 1.7e-180;

Matches 956; Conservative 0; Mismatches 509; Indels 12; Gaps 3;

QY 88 ATGGGCTGTACACCTTATGTCACCTTCTCTGACCATCGTCTACCCGTTTACTC 147

Db 1 ATGGGCTCCCGGCGTCTGCGCAGTGTGCTCTGACCTTCTGCTGCGCTGCTC 60

QY 148 TTCTTCGCGCGGTGAAGTTGGGAGATGTAATGATCCGACAGTCCGAACTGC 207

Db 61 TTCTTCGCGGTGATCAAGCTTCTGGACCTGACTGCGTGGCGCGCGGACCGAGTTG 120

QY 208 AGAAGTCTCTACCGCCAGGTACATGCGGCTTGCCTTCATTGGAGAAAGCTCCAGCTG 267

Db 121 GCCTCCCATTCGCCCGGAGCTATGGGCTTCCCTTCTTTGGGAAACCTTGCAGATG 180

QY 268 ATCTCTCAGAGAGAGATTTCTGCGCATGAAGCGGAGAAATAGGGTGCATCTACAG 327

Db 181 GTACTGCGAGGAGAGTTCTCTGAGATGAAGCGGAGAAATACGGCTTCACTCAAG 240

QY 328 ACGCACTCTTCGGGAACCGGACTGTGAGGTGATGGAGCTGATAATGTGAGCGAGATT 387

Db 241 ACGCATCTGTTCGGGCGGCCCAACCGTACGGGTGATGGCGCGAATGTGGCGGCTC 300

QY 388 CTGCTGGGCGGAACACAGCTGGTGTCTGTTTCAAGTGGCCAGCATCATGAGAACCATCTG 447

Db 301 TTGCTCGAGACGACGGCTGGTGGTCCACTGGCCAGCGTGGTGCCACCATCTG 360

QY 448 GGCTCTGACACCTCTCCATGTCCATGAGTTCAACAAAACAGAAAGGCCATT 507

Db 361 GGATCTGGCTGGCTCTCTTAACCTGTCAGCTCTCGCACAGAGCGCGAAGAGTGATT 420

QY 508 ATGAGGGGCTTCTCTCGAGATGCTCTGAGACTATATCCCGTGTATCCAGCAGAGGTG 567

Db 421 ATGCGGGCTTTAGCGCGAGGCACTCGATGCTAGTCCCGGTGATCCACCGAGAGTG 480

QY 568 AAGAGCGCCATACAGGAATGGCTG---CAAAAAGACTCTCTCGTGTCTGTTTATCCAGAA 624

Db 481 GGCAGCAGCTTGGAGCAGTGGCTGAGCTGGCGAGCGCGCTCTCTGCTCTACCCCGAG 540

QY 625 ATGAGAAACTCATGTTTGGGATAGCTATGAGAACTCTGCTTGGTTTGAACC-----A 678

Db 541 GTGAAGCGCTCATGTTCCGAATCGCATCGCATCTCTACTGGGCTGCGNACCCCACTG 600

QY 679 GAGCAATTAAGACGCGAGCAAGAACTGGTGAAGCTTTTGGAGAAATGATCAAAAC 738

Db 601 GCGGCGAGCGGCACTCCGAGCAGCAGCTTGTGAGGCTTCGAGGAAATGACCCGCAAT 660

QY 739 TTGTTCTCTTGGCAATCGAGCTTCTTTCAGTGTGCTGTACAGGGGTTTGGAGCGCAGC 798

Db 661 CTCTTCTGCTGCCCATCGACGTGCTTTCAGCGGCTGTACCGGGGCTGTAAGGCGCGG 720

QY 799 AATTTCTATCTCCAAATTAAGGAAACATCAGGAGAAATTCAG---ATGACGAC 855

Db 721 AACCTATTACGGCGGCGATCGAGCAAACTTCGCGCCAGATCTCGGGGCTGCGGCA 780

QY 856 AATGAAAACGAAACAGAAATACAAGAGCGCTTTCAGCTGTGATGAGAGAAAGAGAGA 915

Db 781 TCCGAGGCGGCGCAGGCTGCAAGAGCGCTGCTGCTGATCGAGCACTCGTGGAG 840

QY 916 AGTGAAGAACTTTAGTTTTCAGCGCATGAAGAGCAGCTACAGAGCTTCTATTGGA 975

Db 841 AGGGAGAGCGGCTGGACATGACGCACTTAAGCAATCTTCAACGAACTCTCTTTTGA 900

QY 976 GGTCTGAAACACCGCGCAGCACTGCAACCTTCACTGTCTGTTCTGGGTCTGAACACA 1035

Db 901 GGAACGAAACACCGCGCAGTGGACCACTCTCTGATCACTTACCTGGGGCTCTACCCA 960

QY 1036 GAAAGTGTGCAAGAGTTCAGAGAGAGGTTTCAGAGAGAGGTTGAAATGGGCTGTATACA 1095

Db 961 CATGTTCTCCAGAAAGTGCAGAGAGCTGAAGAGTAAAGGTTTACTTTGCAAGACAA 1020

QY 1096 CTTGGAAGGGCTTGAATGAGTGTGAGCTGTTGACCGAGCTGAGTACACTGTGATGATT 1155

Db 1021 CAAGACAAACAGTTGGACATGGAATTTTGAACAACTTAATATATCTCGGTGTATT 1080

QY 1156 AAAGAGACTCTTAGAATCAACCTCTCTGTTCCCGAGGAGTTTCCAGAGTCCGCTCAAAAC 1215

Db 1081 AAGGAGACCTTTCGACTGATCCCGAGTCCAGAGGGTTTCGGGTGCTCTGAAGACT 1140

QY 1216 TTGAATTAATGATGTTTCAAAATCTCTAAAGATGGAAGCTATTTACAGCACTGTGAC 1275

Db 1141 TTTGAATTAATGATGATCCAGATTCCTCAGAGGCTGGAATGTTATCTACAGTATCTGTGAT 1200

QY 1276 ACGCAGATGTTGGCGAGCTTTCACAAACAGAGAGGTTCCAGCGGAGAGATTCATG 1335

Db 1201 ACTCATGATGTTGGCAGAGATCTTCCACAAAGAGAGAAATTTAATCTCGACCGATTCACT 1260

QY 1336 AGCAAGGCTCTGGAGAGCGGCTCCAGGTTTAACTACATCCCTTCGAGAGGAGATCCAG 1395

Db 1261 GCTCTCCACCGAGAGATGATCCAGTTCAGTTCATTCATTCATTGGAGAGGCTTAGG 1320

QY 1396 ATGTGTGTGGCAAGAGATTGCGCAAGTGTGTACTCAAGATCTTTTGTAGTTGAGTTAAG 1455

Db 1321 AGCTGTGTAGGCAAGAAATTTGCAAAATTTCTTCTCAAAATATTACAGTGGAGCTGGCC 1380

QY 1456 CAGCATTCGAATTTGATTTCTCTCAAAACGAGCGCCCGCAATGAAACAGAGCGCCGACTATT 1515

\*\*\*\*\*OTOT

Db 303 TATTATTAACATGTTCTTACAAAAA 337

## RESULT 8

US-08-724-466B-11  
; Sequence 11, Application US/08724466B  
; Patent No. 6063606  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; ZIP: M5L 1A9  
; COUNTRY: Canada  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/724,466B  
; FILING DATE: October 1, 1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00004  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 351 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-724-466B-11

Query Match 9.5%; Score 175.6; DB 3; Length 351;  
Best Local Similarity 68.9%; Pred. No. 6.5e-45;  
Matches 241; Conservative 0; Mismatches 109; Indels 0; Gaps 0;  
Qy 961 GAGCTTCTATTGGAGGTCTATGAAACCCAGCAGCTGCAACCTCACTTGTGTCATGTTT 1020  
Db 1 GAATCTCTTTGGAGGACAGAAACCCAGCGCCAGTGCAGCCACATCTCTGATCACTTAC 60  
Qy 1021 CTGGGTCTCAACACAGAGTGTGCGAAGGTTCAGAGAGGTTTCAGAGAGGTTGAA 1080  
Db 61 CTGGGCTCTACCCACATGTTCTCCAGAAAGTGCAGAGAGCTGAAGAGTAAGGGTTTA 120  
Qy 1081 ATGGGCATGTATACACCTGGAAGGGCTTGAGTATGAGCTGTGACCCAGCTGAAGTAC 1140  
Db 121 CTTTGCAGAGCATCAAGACACAGTTGGACATGGAATTTTGAACACTTAAATAC 180  
Qy 1141 ACTGGATGTGATTAAAGAGACTCTTAGAATCAACCTCTGTTCCCGAGAGATTGAGA 1200  
Db 181 ATCGGGTGTGTTTAAAGGAGAGCCCTTCGACTGAATCCCCAGTTCCAGAGGGTTTCGG 240  
Qy 1201 GTGGCACTCAAAACCTTTGAATGATGTTACCAATCTCTAAAGGATGGAAGTCATT 1260  
Db 241 GTTGCTCTGAAGACTTTTGAATTTAAATGATGATGATGATGATGATGATGATGATG 300  
Qy 1261 TACAGCATCTGTGACAGCAGCATGTGGCCGACGCTCTTTCCAAACAAAGA 1310  
Db 301 TACAGTATCTGTGATATCTCATGATGTGGCAGAGATCTTCCACACAGGA 350

## RESULT 9

US-08-882-164D-11  
; Sequence 11, Application US/08882164D  
; Patent No. 6306624  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 43  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5L 1A9  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,164D  
; FILING DATE: June 25, 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; APPLICATION NUMBER: 08/724,466  
; FILING DATE: October 1, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00010  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 351 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-882-164D-11

Query Match 9.5%; Score 175.6; DB 4; Length 351;  
Best Local Similarity 68.9%; Pred. No. 6.5e-45;  
Matches 241; Conservative 0; Mismatches 109; Indels 0; Gaps 0;  
Qy 961 GAGCTTCTATTGGAGGTCTATGAAACCCAGCAGCTGCAACCTCACTTGTGTCATGTTT 1020  
Db 1 GAATCTCTTTGGAGGACAGAAACCCAGCGCCAGTGCAGCCACATCTCTGATCACTTAC 60  
Qy 1021 CTGGGTCTCAACACAGAGTGTGCGAAGGTTCAGAGAGGTTTCAGAGAGGTTGAA 1080  
Db 61 CTGGGCTCTACCCACATGTTCTCCAGAAAGTGCAGAGAGCTGAAGAGTAAGGGTTTA 120  
Qy 1081 ATGGGCATGTATACACCTGGAAGGGCTTGAGTATGAGCTGTGACCCAGCTGAAGTAC 1140  
Db 121 CTTTGCAGAGCATCAAGACACAGTTGGACATGGAATTTTGAACACTTAAATAC 180  
Qy 1141 ACTGGATGTGATTAAAGAGACTCTTAGAATCAACCTCTGTTCCCGAGAGATTGAGA 1200  
Db 181 ATCGGGTGTGTTTAAAGGAGAGCCCTTCGACTGAATCCCCAGTTCCAGAGGGTTTCGG 240  
Qy 1201 GTGGCACTCAAAACCTTTGAATGATGTTACCAATCTCTAAAGGATGGAAGTCATT 1260  
Db 241 GTTGCTCTGAAGACTTTTGAATTTAAATGATGATGATGATGATGATGATGATGATG 300  
Qy 1261 TACAGCATCTGTGACAGCAGCATGTGGCCGACGCTCTTTCCAAACAAAGA 1310  
Db 301 TACAGTATCTGTGATATCTCATGATGTGGCAGAGATCTTCCACACAGGA 350



RESULT 11  
US-08-882-164D-36  
; Sequence 36, Application US/08882164D  
; Patent No. 6306624  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 43  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5L 1A9  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,164D  
; FILING DATE: June 25, 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; APPLICATION NUMBER: 08/724,466  
; FILING DATE: October 1, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00010  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 36:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2677 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-882-164D-36  
Query Match 6.7%; Score 124.4; DB 4; Length 2677;  
Best Local Similarity 67.5%; Pred. No. 3.2e-28;  
Matches 156; Conservative 10; Mismatches 66; Indels 0; Gaps 0;  
QY 269 TCCTCCAGAGAGAGAGTTTCGGCGCATGAAACGGCAGAAATACGGGTGCATCTACAGA 328  
DB 1041 TCCAMAGCGGARSARWKCVMRGATGAAGCGCAGGAAATACGGCTTCATCTACAGA 1100  
QY 329 CGACCTCTTCGGACACCGACTGTCAGGTTGATGGAGCTGATAATGTGAGCGCATTC 388  
DB 1101 CGCATCTGTTCGGCGCCGCCGCTACCGGTTGATGGCGGCAATGTGCGGCGCATCT 1160  
QY 389 TGTCTGGGGAACACACAGCTGGTGTCTGTTCAGTGGCCAGCATCATGAGAACCATCTGG 448  
DB 1161 TGTCTGGGAGACACCGGCTGGTGTTCGTCACCTGGCTGGCGAGCTGGTGGCACCATTCTGG 1220  
QY 449 GCTCTGACACCTCTCCCATGTCCATGGAGTTCAACACAAACACAGAAAGG 502  
DB 1221 CATCTGGTGGCTCTCTTAACCTGCACGACTCTCTCGCACAGCGCGCAGAGG 1274

RESULT 12  
US-08-882-164D-37/c  
; Sequence 37, Application US/08882164D  
; Patent No. 6306624  
; GENERAL INFORMATION:  
; APPLICANT: Petkovich, P. Martin, White, Jay A.,  
; APPLICANT: Beckett, Barbara R., Jones, Glenville  
; TITLE OF INVENTION: Retinoid Metabolizing Protein  
; NUMBER OF SEQUENCES: 43  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Blake, Cassels & Graydon  
; STREET: Box 25, Commerce Court West  
; CITY: Toronto  
; STATE: Ontario  
; COUNTRY: Canada  
; ZIP: M5L 1A9  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ, IBM PC compatible  
; OPERATING SYSTEM: MS-DOS 5.1  
; SOFTWARE: WORD PERFECT  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/882,164D  
; FILING DATE: June 25, 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/667,546  
; FILING DATE: June 21, 1996  
; APPLICATION NUMBER: 08/724,466  
; FILING DATE: October 1, 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Hunt, John C.  
; REGISTRATION NUMBER: 36,424  
; REFERENCE/DOCKET NUMBER: 50767/00010  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (416) 863-4344  
; TELEFAX: (416) 863-2653  
; INFORMATION FOR SEQ ID NO: 38:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 4164 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-882-164D-38  
Query Match 9.2%; Score 170; DB 4; Length 4164;  
Best Local Similarity 70.5%; Pred. No. 2.1e-42;  
Matches 227; Conservative 0; Mismatches 95; Indels 0; Gaps 0;  
QY 1226 ATGGTTACCAATTCCTAAGATGGAAGTCACTTACAGCATCTGTGACGACGATG 1285  
DB 2822 AGGGATACCATGATCCCAAGGCTGGAATGTTATTTACAGTATCTGTGACACCCACGATG 2881  
QY 1286 TGGCGGAGCTTTTCCAAACAAAGAGGAGTTCCAGCCGAGAGATTCATGAGCAAGGTC 1345  
DB 2882 TGGCAGATACTTCACTACAGAGAGGATTTAATCCGACCGCTTATAGTGCCTCATC 2941  
QY 1346 TGGAGGAGCGGTCCAGGTTTAACATACATCCCTTCGGAGGAGGATCCAGATGTGTGG 1405  
DB 2942 CAGAGGATGCTTCCCGGTTTCACTTCATTTGAGGAGGCGCTTCGGAGGCTGTGAG 3001  
QY 1406 GCAAGAGTTCCGCAAGTGTACTCAAGATCTTTTGTAGTTAAGTAAACGAGCATGCA 1465  
DB 3002 GCAAGAGTTTGCAGAAATTTCTTTAGATATTTACGTGAGCTGTGCTAGGCTGTG 3061  
QY 1466 ATGGATCTCTCAACGAGCCCGGACATGAAGAAACAGGCCCGACATTTTACCCAGTGG 1525  
DB 3062 ATTGGAGCTTCTAAATGGACCTCTCAATGAGACAGCCCACTGTGTACCTGTGG 3121  
QY 1526 ACAATCTCCCTACCAATTCAC 1547  
DB 3122 ACAATCTCCCTGCAAGATTTAC 3143

TITLE OF INVENTION: Retinoid Metabolizing Protein  
 NUMBER OF SEQUENCES: 43  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Blake, Cassels & Graydon  
 STREET: Box 25, Commerce Court West  
 CITY: Toronto  
 STATE: Ontario  
 COUNTRY: Canada  
 ZIP: M5L 1A9  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette, 3 1/2 inch, 1.4 Mb storage  
 COMPUTER: COMPAQ, IBM PC compatible  
 OPERATING SYSTEM: MS-DOS 5.1  
 SOFTWARE: WORD PERFECT  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/882,164D  
 FILING DATE: June 25, 1997  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/667,546  
 FILING DATE: June 21, 1996  
 APPLICATION NUMBER: 08/724,466  
 FILING DATE: October 1, 1996  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Hunt, John C.  
 REGISTRATION NUMBER: 36,424  
 REFERENCE/DOCKET NUMBER: 50767/00010  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (416) 863-4344  
 TELEFAX: (416) 863-2653  
 INFORMATION FOR SEQ ID NO: 37:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 683 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 US-08-882-164D-37

Query Match 3.9%; Score 72; DB 4; Length 683;  
 Best Local Similarity 63.5%; Pred. No. 3.6e-12;  
 Matches 108; Conservative 1; Mismatches 61; Indels 0; Gaps 0;  
 QY 1073 AGGTTGAAATGGCGATGTATACACCTGGAAGGGCTTCAGTATGGAGCTGTGGACAGC 1132  
 DB 292 AGGGTTTACTTTCAGAGCAATCAAGACHAAGTTGGACATGGAAATTTGGACAC 233  
 QY 1133 TGAATACACTGGATGTGTGATTAAGAGACTCTTAGAATCAACCTCTCTGTTCGGGAG 1192  
 DB 232 TTATATACATCGGGTGTGTATTAAAGAGAGACCTTCGACTGAATCCCCAGTTCAGGAG 173  
 QY 1193 GAATCAGATCGCACTCAAACTTGAATGAATGGTTACCAATTCCT 1242  
 DB 172 GGTTCGGGTTGCTCTGAAGACTTTTGAATTAATGAATTAATTCCT 123

RESULT 13  
 US-09-583-447A-9  
 ; Sequence 9, Application US/09583447A  
 ; Patent No. 6645745  
 ; GENERAL INFORMATION:  
 ; APPLICANT: WOJNOWSKI, Leszek  
 ; APPLICANT: GELLNER, Klaus  
 ; APPLICANT: EISELT, Regina  
 ; TITLE OF INVENTION: IDENTIFICATION OF A NEW MEMBER OF THE CYTOCHROME P450 3A  
 ; FILE REFERENCE: 310115.401  
 ; CURRENT APPLICATION NUMBER: US/09/583,447A  
 ; CURRENT FILING DATE: 2000-05-30  
 ; NUMBER OF SEQ ID NOS: 45  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 9  
 ; LENGTH: 1192  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens

FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (1)..(378)  
 US-09-583-447A-9  
 Query Match 3.8%; Score 69.4; DB 4; Length 1192;  
 Best Local Similarity 52.2%; Pred. No. 3.5e-11;  
 Matches 154; Conservative 0; Mismatches 141; Indels 0; Gaps 0;  
 QY 1124 TGGACAGCTGAAGTACACATGGATGTGTATTAAAGAGACTCTTAGAATCAAAACCCCTCTG 1183  
 DB 729 TGGTACAGATGGAGTACCTTGACATGGTGGTGAATGAAGCGTCAAGATTATCCAGTTG 788  
 QY 1184 TTCCCGAGGATTACAGAGTCGCACTCAAAACCTTTGAATTAAGATGGTTACCAATTCCTA 1243  
 DB 789 TTAGTAGAGTTACGAGAGTCTGCAAGAAAGATATTGAATCAATGGAGTGTTCATTTCCA 848  
 QY 1244 AAGATGGAACCTCATTTACAGACTGTGACAGCGACGATGTGGCCGACGCTTTTCCAA 1303  
 DB 849 AAGGTTAGCAGTGTGTTCCAACTATGTCTTCCACATGATGATGATGATGATGATGATG 908  
 QY 1304 ACAAGAGGAGTTCCAGCCGAGAGATTTCATGACAAAGGCTCTGGAGGACGGGTCCAGGT 1363  
 DB 909 AGCTGGAAGTTCTGCCCTGAAAGGTTTCAGTAGAAGACAGACAGCATAGATCTTT 968  
 QY 1364 TTAATACATCCCTTCGGAGGAGATCCAGATGTGTGTGGGCAAGAGTTCCG 1418  
 DB 969 ACAGATACATACCTTTTGGAGCTGGACCCGAAACTGCATTTGGCATGAGGTTTC 1023

RESULT 14  
 US-09-583-447A-7  
 ; Sequence 7, Application US/09583447A  
 ; Patent No. 6645745  
 ; GENERAL INFORMATION:  
 ; APPLICANT: WOJNOWSKI, Leszek  
 ; APPLICANT: GELLNER, Klaus  
 ; APPLICANT: EISELT, Regina  
 ; TITLE OF INVENTION: IDENTIFICATION OF A NEW MEMBER OF THE CYTOCHROME P450 3A  
 ; FILE REFERENCE: 310115.401  
 ; CURRENT APPLICATION NUMBER: US/09/583,447A  
 ; CURRENT FILING DATE: 2000-05-30  
 ; NUMBER OF SEQ ID NOS: 45  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 7  
 ; LENGTH: 1633  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (1)..(750)  
 US-09-583-447A-7

Query Match 3.8%; Score 69.4; DB 4; Length 1633;  
 Best Local Similarity 52.2%; Pred. No. 4.3e-11;  
 Matches 154; Conservative 0; Mismatches 141; Indels 0; Gaps 0;  
 QY 1124 TGGACAGCTGAAGTACACATGGATGTGTATTAAAGAGACTCTTAGAATCAAAACCCCTCTG 1183  
 DB 1170 TGGTACAGATGGAGTACCTTGACATGGTGGTGAATGAAGCGTCAAGATTATCCAGTTG 1229  
 QY 1184 TTCCCGAGGATTACAGAGTCGCACTCAAAACCTTTGAATTAAGATGGTTACCAATTCCTA 1243  
 DB 1230 TTAGTAGAGTTACGAGAGTCTGCAAGAAAGATATTGAATCAATGGAGTGTTCATTTCCA 1289  
 QY 1244 AAGATGGAACCTCATTTACAGACTGTGACAGCGACGATGTGGCCGACGCTTTTCCAA 1303  
 DB 1290 AAGGTTAGCAGTGTGTTCCAACTATGTCTTCCACATGATGATGATGATGATGATGATG 1349  
 QY 1304 ACAAGAGGAGTTCCAGCCGAGAGATTTCATGAGCAAGGCTCTGGAGGACGGGTCCAGGT 1363  
 DB 1350 AGCTGGAAGTTCTGCCCTGAAAGGTTTCAGTAGAAGACAGACAGCATAGATCTTT 1409

Mon May 24 14:04:27 2004

QY 1364 TTAACATACATCCCTTCGGAGGAGGATCCAGGATGTGTGGCAAGAGTTGCG 1418  
 Db 1410 ACAGATACATACCTTTTGGAGCTGGACCCGAACTGGCATTTGGCATGAGTTTCG 1464

RESULT 15

US-09-583-447A-1  
 ; Sequence 1, Application US/09583447A  
 ; Patent No. 6645745  
 ; GENERAL INFORMATION:  
 ; APPLICANT: WOJNOWSKI, Leszek  
 ; APPLICANT: GELLNER, Klaus  
 ; APPLICANT: EISELT, Regina  
 ; TITLE OF INVENTION: IDENTIFICATION OF A NEW MEMBER OF THE CYTOCHROME P450 3A  
 ; TITLE OF INVENTION: (CYP3A) GENE FAMILY: CYP3AX  
 ; FILE REFERENCE: 310115.401  
 ; CURRENT APPLICATION NUMBER: US/09/583,447A  
 ; CURRENT FILING DATE: 2000-05-30  
 ; NUMBER OF SEQ ID NOS: 45  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 1  
 ; LENGTH: 1659  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (105)..(1616)  
 US-09-583-447A-1

Query Match 3.8%; Score 69.4; DB 4; Length 1659;  
 Best Local Similarity 52.2%; Pred.No. 4.4e-11;  
 Matches 154; Conservative 0; Mismatches 141; Indels 0; Gaps 0;  
 QY 1124 TGGACACAGCTGAGTACACTGGATGTGATTAAAGAGACTCTTAGAATCAACCTCCTG 1183  
 Db 1153 TGGTACAGATGGAGTACCTTGACATGGTGTGATGAAGACCTCAGATTATTCCTCAGTTG 1212  
 QY 1184 TTCCCGGAGGANTCAGAGTGCACCTCAAAACCTTTGAAATGATGGTTACCAATTCTTA 1243  
 Db 1213 TTAGTAGAGTTACGAGAGTCTGCAAGAAAGATATTGAATCAATGGAGTGTTCATCCCA 1272  
 QY 1244 AAGATGGAAAGTCATTTACAGATCTGTGACACGACGATGTGGCGAGCTTTTCCAA 1303  
 Db 1273 AAGGTTAGCAGTGTGTTCCATCTATCTCTTCCATGACCCAAAGTACTGGAAG 1332  
 QY 1304 ACAGAGAGGATTCAGCGGAGAGATTTCATGAGCAAGGTCTGGAGGACGGGTCCAGGT 1363  
 Db 1333 AGCTGGAAGATTCTGCTCTGAAAGTTTCAAGTTTCAATGAGNAGNAGNAGNAGNAGNAGTATCTTT 1392  
 QY 1364 TTAACATACATCCCTTCGGAGGAGGATCCAGGATGTGTGGCAAGAGTTTCGC 1418  
 Db 1393 ACAGATACATACCTTTTGGAGCTGGACCCGAACTGCATTGGCATGAGGTTTCG 1447

Search completed: May 22, 2004, 18:09:30  
 Job time : 112 secs

Mon May 24 14:04:27 2004

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 22, 2004, 18:02:13 ; Search time 593 Seconds  
(without alignments)

14178.324 Million cell updates/sec

Title: US-09-668-482-3

Perfect score: 1850

Sequence: 1 TGTCGGCTGCTGCTCGGTT.....GTTCACAAAAA 1850

Scoring table: GAPOP 10.0 , Gapext 1.0

Searched: 2953838 seqs, 2272363821 residues

Total number of hits satisfying chosen parameters: 5907676

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:\*

- 1: /cgn2\_6/ptodata/2/pubpna/US07\_PUBCOMB.seq:\*
- 2: /cgn2\_6/ptodata/2/pubpna/ECT\_NEW\_PUB.seq:\*
- 3: /cgn2\_6/ptodata/2/pubpna/US06\_NEW\_PUB.seq:\*
- 4: /cgn2\_6/ptodata/2/pubpna/US06\_PUBCOMB.seq:\*
- 5: /cgn2\_6/ptodata/2/pubpna/US07\_NEW\_PUB.seq:\*
- 6: /cgn2\_6/ptodata/2/pubpna/ECTUS\_PUBCOMB.seq:\*
- 7: /cgn2\_6/ptodata/2/pubpna/US08\_NEW\_PUB.seq:\*
- 8: /cgn2\_6/ptodata/2/pubpna/US08\_PUBCOMB.seq:\*
- 9: /cgn2\_6/ptodata/2/pubpna/US09A\_PUBCOMB.seq:\*
- 10: /cgn2\_6/ptodata/2/pubpna/US09B\_PUBCOMB.seq:\*
- 11: /cgn2\_6/ptodata/2/pubpna/US09C\_PUBCOMB.seq:\*
- 12: /cgn2\_6/ptodata/2/pubpna/US09\_NEW\_PUB.seq:\*
- 13: /cgn2\_6/ptodata/2/pubpna/US10A\_PUBCOMB.seq:\*
- 14: /cgn2\_6/ptodata/2/pubpna/US10B\_PUBCOMB.seq:\*
- 15: /cgn2\_6/ptodata/2/pubpna/US10C\_PUBCOMB.seq:\*
- 16: /cgn2\_6/ptodata/2/pubpna/US10\_NEW\_PUB.seq:\*
- 17: /cgn2\_6/ptodata/2/pubpna/US60\_NEW\_PUB.seq:\*
- 18: /cgn2\_6/ptodata/2/pubpna/US60\_PUBCOMB.seq:\*
- 19: /cgn2\_6/ptodata/2/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	265.2	14.3	4445	US-10-295-027-680	Sequence 680, Appl
2	262	14.2	4660	US-10-182-951-21	Sequence 21, Appl
3	235.8	12.7	2065	US-10-181-108-46	Sequence 46, Appl
4	89.4	4.8	1615	US-10-424-599-132340	Sequence 132340,
5	86.8	4.7	1920	US-10-424-599-97090	Sequence 97090, A
6	79.6	4.3	1458	US-10-142-231-81	Sequence 81, Appl
7	79.6	4.3	1458	US-10-356-153-81	Sequence 81, Appl
8	78.4	4.2	2019	US-10-274-694-33	Sequence 33, Appl
9	78.4	4.2	2498	US-10-274-694-21	Sequence 21, Appl
10	77.8	4.2	1118	US-10-424-599-50750	Sequence 50750, A
11	77.4	4.2	866	US-10-181-108-47	Sequence 47, Appl
12	73	3.9	1452	US-10-142-231-49	Sequence 49, Appl
13	73	3.9	1452	US-10-356-153-49	Sequence 49, Appl
14	70.6	3.8	791	US-10-425-114-12586	Sequence 12586, A

15	70.6	3.8	1925	16	US-10-310-154-13	Sequence 13, Appl
16	70.2	3.8	786	15	US-10-073-885-25	Sequence 25, Appl
17	69.8	3.8	406	9	US-09-864-761-21145	Sequence 21145, A
18	69.6	3.8	955	13	US-10-424-599-30872	Sequence 30872, A
19	69.4	3.8	1192	14	US-10-007-814-9	Sequence 9, Appl
20	69.4	3.8	1613	15	US-10-274-694-25	Sequence 25, Appl
21	69.4	3.8	1631	15	US-10-274-694-34	Sequence 34, Appl
22	69.4	3.8	1633	14	US-10-007-814-7	Sequence 7, Appl
23	69.4	3.8	1659	14	US-10-007-814-1	Sequence 1, Appl
24	69.4	3.8	1915	13	US-10-112-944-188	Sequence 188, Appl
25	69.4	3.8	1973	14	US-10-007-814-11	Sequence 11, Appl
26	69	3.7	391	15	US-10-029-386-15648	Sequence 15648, A
27	69	3.7	579	15	US-10-029-386-1948	Sequence 1948, Appl
28	68.2	3.7	1971	9	US-09-954-456-184	Sequence 184, Appl
29	68.2	3.7	1371	9	US-09-880-107-1589	Sequence 1589, Appl
30	68.2	3.7	1371	9	US-09-957-997-2	Sequence 2, Appl
31	68.2	3.7	1971	10	US-09-873-367C-651	Sequence 651, Appl
32	68.2	3.7	2011	9	US-10-146-575-1	Sequence 1, Appl
33	68.2	3.7	2759	15	US-10-880-107-2110	Sequence 2110, Appl
34	68.2	3.7	2849	9	US-09-938-842A-619	Sequence 619, Appl
35	67.8	3.7	1419	9	US-09-938-842A-619	Sequence 619, Appl
36	67.8	3.7	1419	11	US-09-764-853-169	Sequence 169, Appl
37	67	3.6	745	9	US-09-764-853-169	Sequence 114, Appl
38	67	3.6	745	10	US-09-764-872-114	Sequence 33, Appl
39	67	3.6	745	13	US-09-764-893-33	Sequence 33, Appl
40	67	3.6	745	15	US-10-073-865-33	Sequence 102, Appl
41	67	3.6	745	15	US-10-103-313-102	Sequence 52, Appl
42	67	3.6	745	15	US-10-073-885-52	Sequence 697, Appl
43	66	3.6	1374	9	US-09-938-842A-697	Sequence 697, Appl
44	66	3.6	1374	11	US-09-938-842A-697	Sequence 84, Appl
45	65.2	3.5	1497	15	US-10-142-231-84	

## ALIGNMENTS

### RESULT 1

US-10-295-027-680  
; Sequence 680, Application US/10295027  
; Publication No. US20030232350A1  
; GENERAL INFORMATION:  
; APPLICANT: Afar, Daniel  
; APPLICANT: Aziz, Natasha  
; APPLICANT: Ginsberg, Wendy M.  
; APPLICANT: Gish, Kurt C.  
; APPLICANT: Glynn, Richard  
; APPLICANT: Hevezi, Peter A.  
; APPLICANT: Mack, David H.  
; APPLICANT: Murray, Richard  
; APPLICANT: Watson, Susan R.  
; APPLICANT: Eos Biotechnology, Inc.  
; TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions and  
; FILE OF INVENTION: Methods of Screening for Modulators of Cancer  
; FILE REFERENCE: 018501-012500US  
; CURRENT FILING DATE: 2002-11-13  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: US 09/663,733  
; PRIOR FILING DATE: 2000-09-15  
; PRIOR APPLICATION NUMBER: US 60/350,666  
; PRIOR FILING DATE: 2001-11-13  
; PRIOR APPLICATION NUMBER: US 60/335,394  
; PRIOR FILING DATE: 2001-11-15  
; PRIOR APPLICATION NUMBER: US 60/332,464  
; PRIOR FILING DATE: 2001-11-21  
; PRIOR APPLICATION NUMBER: US 60/334,393  
; PRIOR FILING DATE: 2001-11-29  
; PRIOR APPLICATION NUMBER: US 60/340,376  
; PRIOR FILING DATE: 2001-12-14  
; PRIOR APPLICATION NUMBER: US 60/347,211  
; PRIOR FILING DATE: 2002-01-08  
; PRIOR APPLICATION NUMBER: US 60/347,349  
; PRIOR FILING DATE: 2002-01-10  
; PRIOR APPLICATION NUMBER: US 60/355,250

PRIOR FILING DATE: 2002-02-08  
PRIOR APPLICATION NUMBER: US 60/356,714  
PRIOR FILING DATE: 2002-02-13  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 1386  
SOFTWARE: Patent In Ver. 2.1  
SEQ ID NO 680  
LENGTH: 4445  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-295-027-680

Query Match 14.3%; Score 265.2; DB 16; Length 4445;  
Best Local Similarity 51.8%; Pred. No. 2.6e-66;  
Matches 712; Conservative 0; Mismatches 638; Indels 24; Gaps 4;

87 CATGGGCTGTACACCTTATGTCACCTTTCTCTGACCATCTGCTTACCGTTTACT 146  
Db  
15 CTTGGATCTGTGTGGCGCTGGCCACCTCCGCCGTGCTGGTTCCTGGAGCTGTCT 74  
Db  
147 CTTTCTCGCGCGGTGAAGTTGGGAGATGTTAATGATCCGACGAGTCGATCCGAATG 206  
Db  
75 GCTGGCGGTGTGGAGCAGCTGTGGCAGCTGGCGCGCCACTCGCGACAGAGCTG 134  
Db  
207 CAGAGTCTCTACGCCAGGTACGATGGGCTTGGCTTCATTGAGAAAGCTCCAGCT 266  
Db  
135 CAAGCTGCCCATCCCAAGGATCCATGGGCTTCCGCTCATCGGAGAGCCGCCACTG 194  
Db  
267 GATCTCCAGAGAGAGTTTCTCGCATGAACCGGAGAAATACGGTGCATCTACAA 326  
Db  
195 GCTGCTCAGAGGTTCTGGCTTCCAGTGTGGCGGAGGAGATGATGCAAGTTCAT 254  
Db  
327 GACGACCTCTTCGGGAACCGACTGTCAAGGTTGATGGAGCTGATATGAGAGAGAT 386  
Db  
255 GACGATTTGTGGGGCGCGCTGATAGCGTGACCGGCGGAGAGAGCTGCCAAGAT 314  
Db  
387 TCTGCTGGCGGAAACAGACTGTGTTCTGTCAGTGGCCAGCATCAGTGAAGACCATCT 446  
Db  
315 CTTATGGGCGGACCACTCGTGTGACACGAGTGGCTCGCAGACCCGATGTTGCT 374  
Db  
447 GGGCTGTGACACCTCTCCATGTCATGGAGTTCAACACAAACAAAGAAAGGCCAT 506  
Db  
375 GGGCCCAACACAGGTGTCCATTCATGTGGCAGCATCCACCGCAACAGCGCAAGTCT 434  
Db  
507 TATGAGGCGCTTCTCTGAGATGCTCTGAGAGCTACATTCCTGATGATCAGAGAGT 566  
Db  
435 CTCAGATCTTCAGCCACGAGGCGCTGGAGAGTTACCTGCCCAAGATCCAGCTGTGAT 494  
Db  
567 GAAGAGCCCATACAGGATGCTGCAAAAGACTCTCGTGGTGTGTTTATCCAGAAAT 626  
Db  
495 CCAGGACACACTGGCGGCTGGAGCAGCCACCCGAGGCCATCAACGTGACAGAGGC 554  
Db  
627 GAAGAACTCATGTTTCGGATAGTATGAGAACTCTGTTGTTTGAACAGAGCAAT 686  
Db  
555 GCAAGAGCTGACCTTCGATGATGATCCGATGCGGCTGCTGGGCTT-----CAGCATCCC 608  
Db  
687 AAAGACGACGACGACAGAACTGTTGAGAGCTTTTGAAGAAATGATCAAAAGTGTCTC 746  
Db  
609 TGAGGAGGACCTTGGCACCTCTTTGAGGTCTACACGAGTTTGTGACAAATGCTCTCTC 668  
Db  
747 CTTGCCAATCAGCTTCTTTTCACTGCTCTGACAGGGTTTGAAGGCGACGCAATTCAT 806  
Db  
669 CTTGCTGTGACCTTGGCTTCACTGCTGCTGAGTGGGCGGATTCAGCTCGGAGATCT 728  
Db  
807 TCACTCCAAAATTGAGGAAACATCAGGAAGAAATTCAGATGACGACATGAAACGA 866  
Db  
729 GCAGAGGGCTGGAGAGGCAATCCGGAGAGAGTGC-----AGTCCACAGAGG 779  
Db  
867 ACAGAAATCAAGAGCGCTTTCAGTGTGATGAGACAGCAGAGAGTGCAGNACC 926  
Db  
780 CAAGAGTACTTGGACGCGCTTGGACCTTCATTGAGAGCAGCAAGGACGCGGAGGA 839  
Db  
927 TTTAGTTTGGAGCGATGAAGAGCAGCTACAGAGCTTCTATTGAGAGTCTATGAAC 986  
Db

840 GATGACCATGACGAGCTGAAGCAGCGGACCTCTGGAGCTGATCTTTCGGGCTATCCAC 899  
Qy  
987 CACGCGCAGCTGACACCTCTCTGTCATGTTCTTGGGCTTGAACACAGAGTGTGCA 1046  
Db  
900 CACGCGCAGCGCAGCCTCTACTATCAGCTGCTGAGACACCCCTGCTGTGCTGA 959  
Qy  
1047 GAAGGTCAGAGAGG-----GGTTGAGAGAGGTTGAATGGGCATGTATACCTGG 1100  
Db  
960 GAGCTGCGGATGAGCTGGGCTCATGGCATCTGCACAGTGGGCTGCCCTGCGA 1019  
Qy  
1101 AAAGGGCTTGTAGTATGAGCTGTGGACCAAGTACAGTACAGTGTGTGATTAAGA 1160  
Db  
1020 GGGCAGACTGCGCTGGACACGCTCAGTGGGCTGCTACCTGAGTGCATCAAGGA 1079  
Qy  
1161 GACTCTTGAATCAACCTCTCTGTCGCGGAGGATTCAGAGTGCACATCAAAACCTTTGA 1220  
Db  
1080 GGTGATGCGCTGTTTCAAGGCTTTCGCGGCTTCCGCGCTACCGCATGCTGTGCTGCA 1139  
Qy  
1221 ATTGAATGTTTACCAATTTCTTAAGGATGGAAGCTCATTTACAGCATCTGTGACAGCA 1280  
Db  
1140 GCTTGTGTTTCCAGATTCCTCAAGGCTGGAGTGTCTATATAGCATCCGAGACCCCA 1199  
Qy  
1281 CGATGTGCGCGAGCTCTTTCGAAACAGAGAGTTCAGCGGAGAGATTCATGAGCAA 1340  
Db  
1200 TGACACAGCGCGCTGTTTCAAGAGCGTGAACGCTGTTGCAACCGCATCGCTTCAGCAGGC 1259  
Qy  
1341 AGGCTCGAGGAC-----GGGTCAGGTTTAACTACATCCCTTCGAGGAGGATCCAGGAT 1397  
Db  
1260 GCGAGAGCGAGGACAGAGATGCGCGCTTCCATCTCCGCTCGGTGGCGGTGTCGAGC 1319  
Qy  
1398 GTGTGTGGGCAAGAGTTCGCAAGGTTTACAGATCTCTTAAGATCTTTTATGTTAGT 1451  
Db  
1320 CTGGCTGGGCAAGCACTGGCGAAGCTGTTCTGAGAGTGTGTCGCGTGGAGCT 1373

RESULT 2

US-10-182-951-21  
Sequence 21. Application US/10182951  
Publication No. US20030138895A1  
GENERAL INFORMATION:  
APPLICANT: INCYTE GENOMICS, INC.  
APPLICANT: TANG, Y. Tom  
APPLICANT: BAUGHN, Mariah R.  
APPLICANT: YAO, Monique G.  
APPLICANT: BANDMAN, Olga  
APPLICANT: AZIMZAL, Valda  
APPLICANT: LAL, Preeti  
APPLICANT: GANDHI, Ameena R.  
APPLICANT: RING, Huijun Z.  
APPLICANT: SHIH, Leo L.  
APPLICANT: YANG, Junming  
APPLICANT: POLICKY, Jennifer L.  
TITLE OF INVENTION: DRUG METABOLIZING ENZYMES  
FILE REFERENCE: PI-0033 PCT  
CURRENT APPLICATION NUMBER: US/10/182,951  
CURRENT FILING DATE: 2002-07-31  
PRIOR APPLICATION NUMBER: 60/181,856; 10/183,684; 60/185,141; 60/186,818; 60/188,34  
PRIOR FILING DATE: 2000-02-11; 2000-02-17; 2000-02-25; 2000-03-03; 2000-03-09; 2000-03-17  
NUMBER OF SEQ ID NOS: 24  
SOFTWARE: PERL Program  
SEQ ID NO 21  
LENGTH: 4660  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
OTHER INFORMATION: Incyte ID No. US20030138895A1 1959720CBI  
US-10-182-951-21

Query Match 14.2%; Score 262; DB 15; Length 4660;  
Best Local Similarity 51.7%; Pred. No. 2.3e-65;  
Matches 710; Conservative 0; Mismatches 640; Indels 24; Gaps 4;

1161 GACTCTAGATCAACCCCTCTCTCTCCCGGAGGATTCCAGAGTCGACCTCAAAACCTTTGA 1220  
Db 1160 GGTCTAGCGCCCTGTTTCAGGCCATTTCCGGCGGCTACCGCACTGTGTCGACGCTTGA 1219  
Qy 1221 ATTCAATGTTTACCAATTTCTTAAGATGGAACGTCATTTACAGCACTGTGACACGCA 1280  
Db 1220 GCTTGTATGTTTCCAGATCCCAAGGCTGGAGTGTCTATATAGCATCCGGGACCCCA 1279  
Qy 1281 CGATGTGGCGAGCTCTTCTCCAAACAAAGAGGAGTTCAGCCGGAGAGATTCTAGACAA 1340  
Db 1280 TGACACAGCGCCGTTGTTCAAGACGTAACGTTTTCAGCCCGATCGCTTCAGCAGGC 1339  
Qy 1341 AGGTCTCGAGGAC---GGGTCCAGGTTTAACTACATCCCTTCGAGGAGGATTCAGGAT 1397  
Db 1340 GCGGAGCGAGCAAGGATGCGGCTTCCATTTACCTCCGTTGGTGGCGGTTCGCGAC 1399  
Qy 1398 GTGTGTGGGCAAGAGTTCGCAAGAGTGTACTCAAGATCTTTTATGTTGAGTT 1451  
Db 1400 CTGCTGGGCAAGCACTGGCCAAAGCTGTTCTCTGAAGGTGCTGGCGGTGAGCT 1453

RESULT 3  
US-10-181-108-46  
; Sequence 46, Application US/10181108  
; Publication No. US200400868541  
; GENERAL INFORMATION:  
; APPLICANT: INCYTE GENOMICS, INC.  
; APPLICANT: YANG, Junming  
; APPLICANT: BAUGHN, Mariah R.  
; APPLICANT: BURFORD, Neil  
; APPLICANT: AU-YOUNG, Janice  
; APPLICANT: LU, Dyung Aina M.  
; APPLICANT: REDDY, Roopa  
; APPLICANT: RING, Huijun Z.  
; APPLICANT: HILLMAN, Jennifer L.  
; APPLICANT: YUE, Henry  
; APPLICANT: AZIMZAI, Yalda  
; APPLICANT: YAO, Monique G.  
; APPLICANT: GANDHI, Ameena R.  
; APPLICANT: NGUYEN, Dannie B.  
; APPLICANT: BAUGHN, Mariah R.  
; APPLICANT: TANG, Y. Tom  
; APPLICANT: LAL, Preeti  
; APPLICANT: YUE, Henry  
; APPLICANT: BANMAN, Olga  
; TITLE OF INVENTION: DRUG METABOLIZING ENZYMES  
; FILE REFERENCE: PI-0007 PCT  
; CURRENT APPLICATION NUMBER: US/10/181,108  
; CURRENT FILING DATE: 2002-07-11  
; NUMBER OF SEQ ID NOS: 48  
; SOFTWARE: PERL Program  
; SEQ ID NO 46  
; LENGTH: 2065  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc feature  
; OTHER INFORMATION: Incyte ID No: 3292871CB1  
US-10-181-108-46

Query Match 12.7%; Score 235.8; DB 17; Length 2065;  
Best Local Similarity 52.2%; Pred. No. 6.8e-58;  
Matches 634; Conservative 0; Mismatches 557; Indels 24; Gaps 4;

Qy 246 CATYGAGAAACGCTCCAGCTGATCTCCAGAGAGGAGTTCTCGCATGAACGGCA 305  
Db 155 CCTGAGAGAGCCCGGTTGGCTCCCGAGGGTTCTGGCTTCCAGTGTGTCGCGAGGA 214  
Qy 306 GAAATACGGTGCATCTACAGAGCGCACTCTTCGGGAACCCGACTGTTCAGGTTGAG 365  
Db 215 GAAGTATGGCAACGTGTTCAGAGCGCATTTGTTGGGGCGCGCTGATACGCGTGACCG 274  
Qy 366 AGCTGAATATGTAGGCGAGATTCTCTGGGGCAACACAAAGCTGTGTCTGTCTAGTGCC 425

87 CATGGGCTGTACACCTTTATGTTACCTTTCTCTGACACATCTGTCGCTACTCCGTTTACT 146  
Db 95 CTTGATCTGTGTGCGCTGCGCACCTCGCGGCTGCTCTGTGTCGCTGACGCTGT 154  
Qy 147 CTTTCTGCGCGGTTGAGTGTGGAGATGTTAATGATCCCGAGGTCGATCCGAACTG 206  
Db 155 GCTGGCGTGTGTCAGAGCTGTGGCAGCTCGGTGGGCGGCCATCTCGGACAGAGCTG 214  
Qy 207 CAGAACTCTCTACCGCAGCTACCATGGGCTTCCTGTTTCATTTGGAGAAAGCTTCCAGCT 266  
Db 215 CAGAGTGCACCTCCCGAGGATCCATGGGCTTCCGCTCATCGGAGAGACCGGCCACTG 274  
Qy 267 GATCTCCAGAGAGAGAGTTTCTGGCATGAAACGCGAGAAATACGGGTGCATCTAATA 326  
Db 275 GCTGCTGCAAGTTTCTGGCTTCCAGTCTGTCGGAGGGAGAGTATGCAACGTTGTCAA 334  
Qy 327 GAGGCACTTTCGGGAACCGACTGTCAAGGTGATGGAGCTGATATGTGAGGAGAT 386  
Db 335 GAGGCATTTGTTGGGCGGCGCTGATACGGGTGACCGCGCGGAGAACGTCGCGCAAGAT 394  
Qy 387 TCTGCTGGGCGAACAAAGCTGTGTCTGTTCAGTGGCCAGCATCATGTGAGAACCACTCT 446  
Db 395 CCTATGGGCGAGACACCTCTGTGAGACCGAGTGGCTCGCAGCACCGCATGTTGTGT 454  
Qy 447 GGGCTGTGACACCTCTCCAAATGTCCATGGATTCACACAAAACAGAAAGGCCAT 506  
Db 455 GGGCCCCAACACAGGTGTCCAATTCATTTGGCGACATCCACCGCAACAAAGCGCAAGTCT 514  
Qy 507 TATGAGGGGCTTCTCGAGATGCTGTGGGCACTACATTCCTGTCATCCAGAGGAGGT 566  
Db 515 CTCCAAGATCTTCAGCCAGAGGCTCTGGAGAGTTTACTCTGCCAAGATCCAGCTGTGTAT 574  
Qy 567 GAAGAGCGCCATACAGGAATGCTGCACAAAAGACTCTCTGCTGTCTGTTTATCCAGAAAT 626  
Db 575 CCAGGACACACTGGCGCTGGAGCGACCCCGAGGCCATCAACGTTTACAGGAGGC 634  
Qy 627 GAAGAACTCATGTTTGGATGTATGAGATCTCTGTGTTGTTTGAACAGGACCAAT 686  
Db 635 GCAGAAGCTGACCTTCGCGATGGCCATCCGGGTGTCTGGGCTT-----CAGCATCC 688  
Qy 687 AAAGCGGACGACAGACTGTTGAGGCTTTTCAGGAATGATCAAAACTTCTTCTC 746  
Db 689 TGAGGAGACCTTGGGCACTCTTTGAGGTTCTACAGAGTTTGTGACATGTTCTTCTC 748  
Qy 747 CTGCAATCGAGTTCCTTTTCAAGTGTCTGTACAGGGGTTTGGGSCACGCAATTTAT 806  
Db 749 CTTGCTGTGACCTGCTTCAAGTGTCTACCGCGGGGCAATTCAGGCTCGGAGATCCT 808  
Qy 807 TCATCCAAATTTGAGAAACATCAGAGAGAAATTCAGATGACGACATGAAACGA 866  
Db 809 GCAGAAGGGGCTGGAGAGGCCATCCGGGAGAGCTGC-----AGTGACACAGGG 859  
Qy 867 ACAGAAATACAAAGCGCTTCAAGTGTGATCGAGACAGCAGAGAGAGTGAAGAAC 926  
Db 860 CAAGGACTACTTGAAGTCTTGAGCTTCTCATTTGAGACGAGGAGGACCGGAGGA 919  
Qy 927 TTTTATGTTGAGGCGATGAAAGAGAGCTTACAGAGCTTCTATTGGAGGTCATGAAC 986  
Db 920 GATGACCATGACGAGCTGAAGAGCGGACCTTGAGCTGATCTTTGCGGCTATGCCAC 979  
Qy 987 CACGCGACGACTGCAACTCTACTGTTCTGTTTCTGGTCTGACACAGAGTGTGCA 1046  
Db 980 CAGGCGACGCGCAGCACTCTCATCATGACAGCTGCTGAAGCAACCCCTCTGTGTGA 1039  
Qy 1047 GAAGGTCAGAGAG-----GGTTCAGGAGAGTTGAAATGGGCTGATATACACTGG 1100  
Db 1040 GAAGCTGCGGATGAGCTGCGGCTCATGGCATCTGACATCTGCGAGTGGCTGCCCTGGA 1099  
Qy 1101 AAAGGCTTGTAGTGTGAGCTGTTGGACCACTGAGATCACTTGAATGTGATTAAGA 1160  
Db 1100 GGGCACACTGCGCTGACACGCTCAGTGGGCTCGCTACCTGGACTCGTGTATCAAGGA 1159

Db 1340 GCTGGCGTGGAGCT 1354

RESULT 4

US-10-424-599-132340

; Sequence 132340, Application US/10424599

; Publication No. US20040031072A1

; GENERAL INFORMATION:

; APPLICANT: La Rosa Thomas J

; APPLICANT: Kovalic David K

; APPLICANT: Zhou Yihua

; APPLICANT: Cao Yongwei

; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With

; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

; FILE REFERENCE: 38-21(5323)B

; CURRENT APPLICATION NUMBER: US/10/424,599

; CURRENT FILING DATE: 2003-04-28

; NUMBER OF SEQ ID NOS: 285684

; SEQ ID NO 132340

; LENGTH: 1615

; TYPE: DNA

; ORGANISM: Glycine max

; FEATURE:

; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_9050C.1

US-10-424-599-132340

Query Match 4.8%; Score 88.4; DB 13; Length 1615;

Best Local Similarity 44.5%; Pred. No. 1.5e-14;

Matches 497; Conservative 0; Mismatches 601; Indels 18; Gaps 3;

305 AGAATACGGGTGCAATCAAGACGACCTCTTCGGGAAACCCGACTGTGAGGTCATGG 364

211 ACAAGTATGCTCCCATTTCAAGAGCTCTTTGGGAAACCAACAGTTTAAATCAATG 270

365 GACCTGATATGTGAGCGAGTCTCTGGGCGAACAACAAGCTGTGTCTGTTCACTGGC 424

271 GACAGCTGCAAAATGAATTTATTTCTCCGGTGGCGGTAAACGATTCACCAAGAAA 330

425 CAGCATCAGTGAAGACCATCTGGGCTGTGACACCTCTCCAATGTCCATGGAGTTCAAC 484

331 CACAGTCCATCAAAATGATCTTAGGTGACCGGAACTTGTGTAATGACTGTGAAAGATC 390

485 AAAAAACAGAAAAAGGCCATTATGAGGGGTTCTCTCGAGATGCTCTGAGCAGCACTACA 544

391 ACAGCGAGTCAGAGGTGCATTTGCCATTTCTTGAAGCCGAAATCTCTTGAAGAGATATG 450

545 TTCCCGTGTATCAGCAGAGGTGCAAGAGCGCATACAGGAATGGCTGCAAAAAGACTCT 604

451 TGGAAAAATGATGAGAAAGTTTGAAGACCTTGAAGATGATTCGACGGGAAACAGC 510

605 GCGTGTGTTTATCCAGAAATGAAGAACTCATGTTTCGGATFAGCTATGAGATCTCTGC 664

511 AGATCAAGGTTATGCCCCCTGATGAGAGCTCTCAATTCACATAATTTGCTCTCTCTGT 570

665 TTGTTTTTGAACGAGCAATTAAGACGAGCAGCAAGAACTGTGTGAAGCTTTTTCAGG 724

571 TTGTTGTTGAGCGTG-----GAAAGCAAGAGATCAATTCCTGATTCCTTCCAG 621

725 AAATGATCAAAACCTGTTCTCTTCCCAATCGAGTTCTTTCAGTGTGTTGTACAGG 784

622 AGATGATCAAGAAATGTTGCTAGTACCAATTAACGTGCCCCCTTCAACGCTACACCGCA 681

785 GTTTGAGGCGCAGCAATTTCACTCCAAAATTTGAGGAAACATCAGGAGAAATTC 844

682 GCCTTAGCAAGTSCAAGAAATCCAGAACTTTTGAAGAGGATTTGTGCAAAAGAAAGA 741

845 AGATGACGCAATGAAGAAACGACAGAAATACAAAGCGCCCTTCAGTGTGTGATCGAGA 904

742 TTGAACCTCAAGCAAAATCGGCATCTGACGCAAGATTTGATCAGTTTCTTGTAGGCA 801

905 ACAGCAGAGCAAGTGAAGAACTTTTATTTGTCAGCGCATGAAAGAGCAGCTACAGAGC 964

802 TGGTTGATGAAGATGCAACCAAGTTATGAGCGAGAAAGAAATCTTTTCAACATTAAGC 861

Db 1340 GCTGGCGTGGAGCT 1354

RESULT 4

US-10-424-599-132340

; Sequence 132340, Application US/10424599

; Publication No. US20040031072A1

; GENERAL INFORMATION:

; APPLICANT: La Rosa Thomas J

; APPLICANT: Kovalic David K

; APPLICANT: Zhou Yihua

; APPLICANT: Cao Yongwei

; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With

; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

; FILE REFERENCE: 38-21(5323)B

; CURRENT APPLICATION NUMBER: US/10/424,599

; CURRENT FILING DATE: 2003-04-28

; NUMBER OF SEQ ID NOS: 285684

; SEQ ID NO 132340

; LENGTH: 1615

; TYPE: DNA

; ORGANISM: Glycine max

; FEATURE:

; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_9050C.1

US-10-424-599-132340

Query Match 4.8%; Score 88.4; DB 13; Length 1615;

Best Local Similarity 44.5%; Pred. No. 1.5e-14;

Matches 497; Conservative 0; Mismatches 601; Indels 18; Gaps 3;

305 AGAATACGGGTGCAATCAAGACGACCTCTTCGGGAAACCCGACTGTGAGGTCATGG 364

211 ACAAGTATGCTCCCATTTCAAGAGCTCTTTGGGAAACCAACAGTTTAAATCAATG 270

365 GACCTGATATGTGAGCGAGTCTCTGGGCGAACAACAAGCTGTGTCTGTTCACTGGC 424

271 GACAGCTGCAAAATGAATTTATTTCTCCGGTGGCGGTAAACGATTCACCAAGAAA 330

425 CAGCATCAGTGAAGACCATCTGGGCTGTGACACCTCTCCAATGTCCATGGAGTTCAAC 484

331 CACAGTCCATCAAAATGATCTTAGGTGACCGGAACTTGTGTAATGACTGTGAAAGATC 390

485 AAAAAACAGAAAAAGGCCATTATGAGGGGTTCTCTCGAGATGCTCTGAGCAGCACTACA 544

391 ACAGCGAGTCAGAGGTGCATTTGCCATTTCTTGAAGCCGAAATCTCTTGAAGAGATATG 450

545 TTCCCGTGTATCAGCAGAGGTGCAAGAGCGCATACAGGAATGGCTGCAAAAAGACTCT 604

451 TGGAAAAATGATGAGAAAGTTTGAAGACCTTGAAGATGATTCGACGGGAAACAGC 510

605 GCGTGTGTTTATCCAGAAATGAAGAACTCATGTTTCGGATFAGCTATGAGATCTCTGC 664

511 AGATCAAGGTTATGCCCCCTGATGAGAGCTCTCAATTCACATAATTTGCTCTCTGT 570

665 TTGTTTTTGAACGAGCAATTAAGACGAGCAGCAAGAACTGTGTGAAGCTTTTTCAGG 724

571 TTGTTGTTGAGCGTG-----GAAAGCAAGAGATCAATTCCTGATTCCTTCCAG 621

725 AAATGATCAAAACCTGTTCTCTTCCCAATCGAGTTCTTTCAGTGTGTTGTACAGG 784

622 AGATGATCAAGAAATGTTGCTAGTACCAATTAACGTGCCCCCTTCAACGCTACACCGCA 681

785 GTTTGAGGCGCAGCAATTTCACTCCAAAATTTGAGGAAACATCAGGAGAAATTC 844

682 GCCTTAGCAAGTSCAAGAAATCCAGAACTTTTGAAGAGGATTTGTGCAAAAGAAAGA 741

845 AGATGACGCAATGAAGAAACGACAGAAATACAAAGCGCCCTTCAGTGTGTGATCGAGA 904

742 TTGAACCTCAAGCAAAATCGGCATCTGACGCAAGATTTGATCAGTTTCTTGTAGGCA 801

905 ACAGCAGAGCAAGTGAAGAACTTTTATTTGTCAGCGCATGAAAGAGCAGCTACAGAGC 964

802 TGGTTGATGAAGATGCAACCAAGTTATGAGCGAGAAAGAAATCTTTTCAACATTAAGC 861

884 CCCTTCAGCTGTTGATCGAGAAACAGCAGAGAAAGTGCAGAACCTTTAGTTTCAGGCGA 943  
919 TTTTGTCTCATCTAAATATATTGTGATGAGAAATGGAACAATATTGCTGGAACATGATA 978  
944 TGAAGAGAGAGCTACAGAGCTTCTATTGAGGTGATGAAACACCGCCAGCAGACTGCAA 1003  
979 TTCTCAACAAGATCCITGGCTTGCTGATGAGTAGCATGAAACCAACAAGTACTGTTGCA 1038  
1004 CCTCATTGTCATGTTCTTGGGTCTGAAACACAGAGTGGTGCAGAGGTGCAGAGAGG 1063  
1039 CTTTCTGTTCAATACCTTGGCGAGCTCCCTCAAAATATTATGMAAATGCTTATCAAG 1098  
1064 TTGAGAGAGAGTGAATAGGATGATGATCACTGGAAGGGCTTGAGTATGAGAGTGT 1123  
1099 AACAAATGGCATTCGAAATCCAA---AAGCTCCAGAGAGTGTGTAATGGGATGACA 1155  
1124 TGGACAGCTGAGTACACATGATGATGATTAAGAGAGCTTTAGAATCAACCTCTCTG 1183  
1156 TCCAGAGAGATGAATATTTCTGGAATGATGCTTGTGAGTAAATAGGCTTAACCTCCAG 1215  
1184 TTCCCGGAGGATTCAGAGTCCGACTCAAAACCTTTGAATGAAATGGTTACCAATTCTTA 1243  
1216 CCAAGAGACTTTAGGGAAGCCATCATGACTTTATCTTCGATGATCTCTCAATTCCAA 1275  
1244 AAGATGGAAGCTCATTTTACAGATCTGTGACACGCGATGTGGCGAGCTCTTTCCAA 1303  
1276 AAGCTGGAAGTGTATTTAGGAGTGCAAATTCACATCAAAATCCAGAGTACTTCCCTG 1335  
1304 ACAAGAGGAGTTCAGCGGAGAGATTCATGAGCAAGGTCTGGAGGACGGGTCCAGGT 1363  
1336 AGCCAGAGAAATTTGATCCAGAGATTTGAAGGAACTGGACCAAG-----CTCCTT 1386  
1364 TTAACATACATCCCTTTCCGAGGAGGATCCAGGATGTGTGGGCAAGAGTTCGCCAAG 1423  
1387 ATACTTATGTCATTTGTTGGAGGCGCAAGTATGTGCTTGGAAAGAGTATGCGGAA 1446  
1424 TGTACTCAAGATCTTTTGTAGTTTACGCGACGATTCGCAATTG 1469  
1447 TGGAACTATTGTTGTTTCAATGACCAACTTAGTGAAGAGTTCAGTG 1492

RESULT 6  
US-10-142-231-81  
; Sequence 81, Application US/10142231  
; Publication No. US2003007796A1  
; GENERAL INFORMATION:  
; APPLICANT: Croteau, Rodney et al.  
; TITLE OF INVENTION: CYTOCHROME P450 OXYGENASES AND THEIR USES  
; FILE REFERENCE: 62773  
; CURRENT APPLICATION NUMBER: US/10/142,231  
; CURRENT FILING DATE: 2002-05-08  
; PRIOR APPLICATION NUMBER: 60/165,250  
; PRIOR FILING DATE: 1999-11-12  
; NUMBER OF SEQ ID NOS: 95  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 81  
; LENGTH: 1458  
; TYPE: DNA  
; ORGANISM: Taxus cuspidata  
US-10-142-231-81  
Query Match 4.3%; Score 79.6; DB 15; Length 1458;  
Best Local Similarity 43.9%; Pred. No. 5.6e-12;  
Matches 502; Conservative 0; Mismatches 624; Indels 18; Gaps 3;  
QY 282 GAAGTTTCTGCCATGAACCGCAGAAATACGGGTGATCTACAGAGCACTCTTCGG 341  
DB 192 GCAGTTTATTTGAAGAGAGATGAGCAATTTGGGGATGTTTCAAGACTTCCATAATCG 251  
QY 342 GAACCCGAGTGTGAGGTGATGGAGCTGATTAATGTGAGGAGATTTCTGCTGGCGGACA 401  
DB 252 GCATCCACAGTAGTGTGTGTGGACCTCCGGAACCGGTGTTGTTCTGTGCAACGAGAA 311

965 TTCTATTGGAGTGCATGAACACCGCCAGACTGGAACCTCTACTGTTGATGTTCTGG 1024  
862 TTGTGATGTTGCTGACATGACACTTTGCGCTGTTCTGATCACTTTTCATCATCCGACTCT 921  
1025 GTCTCAACAGAGAGTGGTGCAGAGTCTCAGAGAGAGTTCAGGAGAGGTTGAAATGG 1084  
922 TAGCCAAACGAACTGCTATCTATGACAGCTTCTTCAAGACAGAGAGATGACAAAG 981  
1085 GCATGATATACACCTTGAAGAGGCTTGAATGATGAGCTGTTGGACCACTGAAAGTACATG 1144  
982 GCAAGCTCTCA---GGAGAGGCACTGACATGSGGAAGACCTTTCAAGATGAGTACACCT 1038  
1145 GATGTTGATTAAGAGATCTTTAGATCAACCTCTCTGTTCCCGAGAGGATTCAGAGTGG 1204  
1039 GGAGAGTAGCAATGGAACCTATTAGGATGTTTCTCTATTGTTGGTGGCTTCAGAAAGG 1098  
1205 CACTCAAAACCTTTGAATGATGATTTACCAATTTCTAAAGATGGAAGCTCATTTACA 1264  
1099 CAGCAACAGATATTGAATATGATGATTTCTCATACCCAAAGGTTGGCAGATTTCTGGG 1158  
1265 GCATCTGTGACACGACGATGTGGCCGACGCTTTTCCAAACAAAGAGAGTTCAGAGCGG 1324  
1159 TCACAGCAATGACACATGACGAAACATTTTCCAGAGCCATCAAAAGATTTGATCTTA 1218  
1325 AGAGATTCATGAGCAAGGCTCTGGAGGAGGCTCCAGTTTAACTACATCCCTTCGGAG 1384  
1219 GTAGATTTGAAACCAAGCATCTGTCCACCTTACTGCTT-----CATTCATTTGGAG 1272  
1385 GAGGTCAGGATGTGTGGCAAGAGGTTGCGCA 1420  
1273 GGGAGCAAGATATGTCAGGATGAGTTTCA 1308

RESULT 5  
US-10-424-599-97090  
; Sequence 97090, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 97090  
; LENGTH: 1920  
; TYPE: DNA  
; ORGANISM: Glycine max  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_58684C.1  
US-10-424-599-97090  
Query Match 4.7%; Score 86.8; DB 13; Length 1920;  
Best Local Similarity 46.6%; Pred. No. 5.2e-14;  
Matches 357; Conservative 0; Mismatches 397; Indels 12; Gaps 2;  
QY 704 AACTGGTGAAGCTTTTGAGGAATGATCAAAACCTTTGTTCTCTGCCAATCGAGTTC 763  
DB 739 AATTGGCAGAACCTTTTAATTCAGGTGATGCGAATTAATCAATGCCATTAATCTCC 798  
QY 764 CTTTCAAGTGTCTGACAGGGGTTTGAGGCGACGCAATTTCAATTCATCCAAATGAGG 823  
DB 799 CCGGAATCTGTTTCAACCGGAGGATCAAGGCTCCAGTTTCAATATGAGGAGGCTTTGA 858  
QY 824 AAAACATCAGGAAGAAATTTCAAGATGACGACATGAGAAACGAAACAGAAATCAAGAGC 883  
DB 859 GGATTGTGAGGGGAGAGAGGTGGAATAGCTAATGAAATGTCACCAACCAACAGACA 918



402 CAAGCTGGTGTCTGTTCACTGGCCGAGCATCAGTGAAGACCATCTCTGGGCTCTGACACCT 461  
Db |||||  
312 CAAGCTGGTGTGAGATGTATGCGCGAGCTCCATGATGAATCATCTCGCGAAGATTGCT 371  
Qy |||||  
462 CTCCTAATGTCATGAGTGTACACAAAACAGAAAAGGCCATTTATGAGGCGTCTTC 521  
Db |||||  
372 CGCGCGCAAAACGGGAGAGCAGCATCGGATCGTACCGCTGCATTAATCTCGTTTGGG 431  
Qy |||||  
522 TCGAGATGCTCTGAGGACCTACATTCCTCGTGATCCAGCAGGAGTGAAGCGCCATACA 581  
Db |||||  
432 TCCTCAGCATTCAGAAATCAATTCCTAAATGAGCTCGGAATCCAGCCACATCAA 491  
Qy |||||  
582 GGAATGGCTGCRAAAGACCTCTCGGTCTGCTGTTTATCCAGAAATGAAGAACTCATGTT 641  
Db |||||  
492 TGAATAATGGAAGGAAGATGAGGCCACTGTACTTCTTTGGTAAAGACCTCTGTT 551  
Qy |||||  
642 TCGGATAGCTATGAGATCTGCTGTTGTTTGAACAGAGCAAAATAAAGACGAGCAGCA 701  
Db |||||  
552 CTCCTGCGAAGCGCTGTTTGTGATTAAGTGAAGGAGCCTGCGAGGCACTTCA 611  
Qy |||||  
702 AGAAGTGTGGAAGCTTTTGAAGAAATGATCAAAAATCTGTTCTCTTTCGCAATCGAGCT 761  
Db |||||  
612 TAACCTGTTGGAGTT-----ATTCTTGTGGATCTTTTCTGTTTCACTCAACAT 662  
Qy |||||  
762 TCCTTTCACTGCTGTACAGGGTTTGAAGGCGCAATTTTCACTCACTCCAAATGGA 821  
Db |||||  
663 TCCCGGATTCAGTTACCATTAAGCGATTGAGCAAGGCCACCTCGCTGATCATATGAC 722  
Qy |||||  
822 GGAACATCAGGAAGAAATTCAGATGACGACAAATGAAGCAAGAAATCAAGA 881  
Db |||||  
723 CCATTTGATAGAAAGAGGAAATGAGCTGCTGCGGACCTGATCTGAGAAATCAAGA 782  
Qy |||||  
882 GCGCCTTCAGCTGTTGATCGAGAACAGAGAAAGTGAAGAACCTTTTGTGTCAGGC 941  
Db |||||  
783 TTTGCTCTCTGTTTGTCTACTTCACTGACAAAGGGGAAATTCATGCGGAGCAAGGA 842  
Qy |||||  
942 GATGAAGAGCAGCTACAGAGCTTTATTTGAGGTCATGAAACCAACCGCCAGCACTGC 1001  
Db |||||  
843 GATCTCGCAACATTTCTATGTTTACTTCTATGATCATATGATCTCCACCAATCCCCACT 902  
Qy |||||  
1002 AACCTCACTGTTCTATGTTTCTGGGTCTGAACACAGAGTGGTGCAAGGTGAGAGGA 1061  
Db |||||  
903 TACCATGTTGATTAAGTCTTGGCTCCCATCCAGAAAGCTATGAAAGAGTGGCTCAAGA 962  
Qy |||||  
1062 GGTTCAGAGAGGTGAAATGGGATGTATACCTCGGAAGGGCTTGAGTATGAGCT 1121  
Db |||||  
963 GCAATTTGGAATACTCTCCACCAAAATGGAGGAGAAATTCCTTGA-----AAGA 1016  
Qy |||||  
1122 GTTGACCGCTGAGTACATCTGATGTGATTAAGAGACTCTTAGAATCAACCTTCC 1181  
Db |||||  
1017 CTTGAAGAGATGAATATTTGCAAGTGTGTTGCAAGAACTTGCATGATGATCTCTCC 1076  
Qy |||||  
1182 TGTTCGCGAGGATTCAGAGTGGCACTCAAACTTTTGAATGATGTTTACCAATTC 1241  
Db |||||  
1077 CATTTTGAACATTTGCAAGCCATCACTGCAATTCATTAATGTTTATACAAATTC 1136  
Qy |||||  
1242 TAAAGATGGAACCTGATTAAGCATCTGTGACAGCAGATGTGGCCAGCTCTTTC 1301  
Db |||||  
1137 AAGAGATGGAACCTTTTATGGAACCTTACAGTACTCAAAACCAAGAGAGATTTTCA 1196  
Qy |||||  
1302 AACAAGAGGAGTTCCAGCGGAGAGATTCATGAGCAAGGCTCTGGAGAGCGGTCCAG 1361  
Db |||||  
1197 GGAGCGCATCAATTCAGCCATCAAGATTTGAGAGGAGG---GAAGCATGTAACCC 1253  
Qy |||||  
1362 GTTTTAACTATCCCTTCGGAGGAGGATCCAGATGTGTGTGGGCAAGATGTTCCCAA 1421  
Db |||||  
1254 TTACACATATCTACCTTTCCGAGGAGGATGCTGTTTGTCCAGGCTGGGAATTCGCAA 1313  
Qy |||||  
1422 AGTG 1425  
Db |||||  
1314 GATG 1317

RESULT 7  
US-10-356-153-81  
; Sequence 81, Application US/10356153  
; Publication No. US20030166176A1  
; GENERAL INFORMATION:  
; APPLICANT: Croteau, Rodney et al.  
; TITLE OF INVENTION: CYTOCHROME P450 OXYGENASES AND THEIR USES  
; FILE REFERENCE: 62773  
; CURRENT APPLICATION NUMBER: US/10/356,153  
; CURRENT FILING DATE: 2003-01-29  
; PRIOR APPLICATION NUMBER: US/10/142,231  
; PRIOR FILING DATE: 2002-05-08  
; PRIOR APPLICATION NUMBER: 60/165,250  
; PRIOR FILING DATE: 1999-11-12  
; NUMBER OF SEQ ID NOS: 95  
; SOFTWARE: Patent In Ver. 2.1  
; SEQ ID NO 81  
; LENGTH: 1458  
; TYPE: DNA  
; ORGANISM: *Taxus cuspidata*  
US-10-356-153-81  
  
Query Match 4.3%; Score 79.6; DB 15; Length 1458;  
Best Local Similarity 43.9%; Pred. No. 5.6e-12;  
Matches 502; Conservative 0; Mismatches 624; Indels 18; Gaps 3;  
  
Qy 282 GAAGTTTTCGCGATGAACCGCAGAAATACGGGTGCAATCTACAAGACGACCTCTCGG 341  
Db 192 GCAATTTTGAAGAGAGATGACAAATTTGGGATGTGTTCAAGACTTCCATAATCGG 251  
Qy 342 GAACCCGACGTGTGAGGATGAGGAGCTGATATGTGAGGCGAGTCTCTGCGGCAACA 401  
Db 252 GCATCCCAAGTAGTGTGTGTGACCTGCCGAAACCGGTGGTCTCTGTGACAGAGAA 311  
Qy 402 CAACTGCTGTCTGTTCACTGTCAGCATCAGTGAGAACCACTCTCTGGCTCTGACACCT 461  
Db 312 CAACTGCTGTGCAATGTCTATGCCGAGCTCCATGATGAATCACTCATCGGAAAGATTGCT 371  
Qy 462 CTCCTAATGTCATGAGTGTCAACACAAAACAGAAAAGGCCATTTATGAGGCGTCTC 521  
Db 372 CGCGGCAAAACGGGAGAGCAGCATCGGATCGTACGCGCTGCTCACTACTCGGTTTTGGG 431  
Qy 522 TCGAGATGCTCTGAGCAGCTACATTCCTGATGATCCAGAGAGGTGAAGAGCGCCATACA 581  
Db 432 TCCTCAAGCATTTGCAAGATCTTCCTGATAAATGAGCTCGGATCCAGCCACATCAA 491  
Qy 582 GGAATGGCTGCRAAAGACCTCTCGGTCTGCTGTTTATCCAGAAATGAAGAACTCATGTT 641  
Db 492 TGAATAATGGAAGGAAGATGAGGCCACTGTACTTCTTTGGTAAAGACCTCTGCTTT 551  
Qy 642 TCGGATGATGAGAAATCTCTGTTGTTTGAACAGAGCAAAATGAAGAGCAGCAGCA 701  
Db 552 CTCCTGCGAAGCGCTTGTGTTTGGTATAACTGAGGAGCACCCTGCGAGGCACTTCA 611  
Qy 702 AGAAGTGTGGAAGCTTTTGAAGAAATGATCAAAAATCTGTTCTCTTTCGCAATCGAGCT 761  
Db 612 TAACCTGTTGGAGTT-----ATTCTTGTGGATCTTTTCTGTTTCACTCAACAT 662  
Qy 762 TCCTTTCACTGCTGTATAGGGGTTTGAAGGCGCAATTTTCACTCACTCCAAATGGA 821  
Db 663 TCCCGGATTCAGTTACCATTAAGCGATTGAGCAAGGCCACCTCGCTGATCATATGAC 722  
Qy 822 GGAACATCAGGAAGAAATTCAGATGACGACAAATGAAGCAAGAAATCAAGA 881  
Db 723 CCATTTGATAGAAAGAGGAAATGAGCTGCTGCGGACCTGATCTGAGAAATCAAGA 782  
Qy 882 GCGCCTTCAGCTGTTGATCGAGAACAGAGAAAGTGAAGAACCTTTTGTGTCAGGC 941  
Db 783 TTTGCTCTCTGTTTGTCTACTTCACTGACAAAGGGGAAATTCATGCGGAGCAAGGA 842  
Qy 942 GATGAAGAGCAGCTACAGAGCTTTATTTGAGGTCATGAAACCAACCGCCAGCACTGC 1001  
Db 843 GATCTCGCAACATTTCTATGTTTACTTCTATGATCATATGATCTCCACCAATCCCCACT 902

## RESULT 9

1789 CCAGATACCTTCCCAACCCCGAGAGATTCCAGCTGAGCGGTCTTCCCGAGAAATGCAC 1848  
1349 AGGACGGGTCCAGGTTTAACTACATCCCTTCGAGGAGGATCCAGGATGTGTGGCA 1408  
1849 AAGGCGCATTCATATGCTAGTGCCCTTCTCTGCTGCCCGAGAACTGTATAGTC 1908  
1409 AAGAGTTGCGCAAGTGTCTACTCAAGATCTTTT 1442  
1909 AAAAGTTTGTGTGATGGAAGAAAGACCATCTT 1942

RESULT 10  
US-10-424-599-50750  
; Sequence 50750, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 50750  
; LENGTH: 1118  
; TYPE: DNA  
; ORGANISM: Glycine max  
; FEATURE:  
; NAME/KEY: unsure  
; LOCATION: (1)..(1118)  
; OTHER INFORMATION: unsure at all n locations  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_16838C.1  
; US-10-424-599-50750

Query Match 4.2%; Score 77.8; DB 13; Length 1118;  
Best Local Similarity 50.3%; Pred. No. 1.6e-11;  
Matches 255; Conservative 0; Mismatches 237; Indels 15; Gaps 2;

964 CTTCTATTGAGGTATGAAACACCCAGCACCTCCTCTGTTCCCGAGGATTCAGATC 1023  
334 CTTTGTATTGAGGACCATGACATGCTAGTGTGCTGCAATCCTTTCATTTGCAATATCTT 393  
1024 GGTCTGAACACAGAGTGTGCAAGGTGAGGTGAGAGAGGTTTCAGGAGAGGTTGAATG 1083  
394 GCTGAACTCCCTCACATTTATGATAGTCTATCAAGAGCAATGGAATTCGAAA--- 450  
1084 GGCATGTATACCTCGAAGAGGCTTGAGTATGAGCTGTGACCCAGCTGAAATGACACT 1143  
451 ---CTGAAATGCCAGGAGATTTTGAATTTGGGATGATGTCACAGGATGCAATTTCT 507  
1144 GGATGTGATTAAGAGACTCTTAGAATCAACCTCTCTGTTCCCGAGGATTCAGATC 1203  
508 TGGAAATGATGCTGTGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATG 567  
1204 GCACTCAAAACCTTTGAATTTGAATTTGAATTTGAATTTGAATTTGAATTTGAATTT 1263  
568 GCTATCAATGACTTTTTCGATGCTTTTCAATATCAAGAGGATGGAATTTGATTTGG 627  
1264 AGCATGTGACAGCAGATGTGGCCGACCTCTTCCAAACAAAGAGGATTCAGCCG 1323  
628 AGTCAAAATTCACACATAAAGTCCGAAATTTTCCAGAGGAGAAATTCGATCCA 687  
1324 GAGAGATTCATGAGCAAGGTCTGAGGAGCGGTCAGGTTTAACTACATCCCTTCGGA 1383  
688 ACTAGATTCGAGGAGCAAGGCGCAG-----CTCCTTATCTTTTGTACCATTTGTT 738  
1384 GGAGATTCAGGATGTGTGTGGGCAAGAGTTCGCAAGTGTGTACTCAAGATCTTTT 1443  
739 GGAGACCAAGAGTGTGCCCGGAAAGAGATGTCGATGGAATATTTGTTTTCATG 798

1141 LAL, Preeti G.  
1142 APPLICANT: LEE, Ernestine A.  
1143 APPLICANT: LU, Dying Aina M.  
1144 APPLICANT: LU, Yan  
1145 APPLICANT: NGUYEN, Daniel B.  
1146 APPLICANT: PATTERSON, Chandra S.  
1147 APPLICANT: RAMKOMAR, Jayalaxmi  
1148 APPLICANT: RING, Huijun Z.  
1149 APPLICANT: SANGJAWALA, Madhusudan M.  
1150 APPLICANT: TANG, Y. Tom  
1151 APPLICANT: THANGAVELU, Kavitha  
1152 APPLICANT: THORNTON, Michael B.  
1153 APPLICANT: TRIBOULEY, Catherine M.  
1154 APPLICANT: WALIA, Narinder K.  
1155 APPLICANT: XU, Yuming  
1156 APPLICANT: YANG, Junming  
1157 APPLICANT: YAO, Monique G.  
1158 APPLICANT: YUE, Henry  
1159 TITLE OF INVENTION: DRUG METABOLIZING ENZYMES  
1160 FILE REFERENCE: PI-0151 USA  
1161 CURRENT APPLICATION NUMBER: US/10/274,694  
1162 CURRENT FILING DATE: 2002-10-18  
1163 PRIOR APPLICATION NUMBER: 60/221,837  
1164 PRIOR FILING DATE: 2000-07-28  
1165 PRIOR APPLICATION NUMBER: 60/220,037  
1166 PRIOR FILING DATE: 2000-07-21  
1167 PRIOR APPLICATION NUMBER: 60/218,948  
1168 PRIOR FILING DATE: 2000-07-14  
1169 PRIOR APPLICATION NUMBER: US01/21324  
1170 PRIOR FILING DATE: 2001-07-05  
1171 PRIOR APPLICATION NUMBER: 60/216,804  
1172 PRIOR FILING DATE: 2000-07-07  
1173 NUMBER OF SEQ ID NOS: 36  
1174 SOFTWARE: PERL Program  
1175 SEQ ID NO 21  
1176 LENGTH: 2498  
1177 TYPE: DNA  
1178 ORGANISM: Homo sapiens  
1179 FEATURE:  
1180 NAME/KEY: misc feature  
1181 OTHER INFORMATION: Incyte ID No. US20030143589A1 8097779CB1  
1182 US-10-274-694-21

Query Match 4.2%; Score 78.4; DB 15; Length 2498;  
Best Local Similarity 48.8%; Pred. No. 1.9e-11;  
Matches 251; Conservative 0; Mismatches 251; Indels 12; Gaps 1;

929 TTAGTTTGCAGCGATGAAGAGCAGCTACAGAGCTTCTATTGAGGTCTATGAACCA 988  
1441 TAAGTCATGAAGATATTCGAGAGAGTTCACACCTTCATGTTTGGGGGCGACATCAA 1500  
989 CGCCAGACACTGCACTCACTTGTATGTTTCTGGGTCTGAACACAGAGTGTGCGA 1048  
1501 CTGACGCTGCAATAACTGCTCTTATACCTGTTGGGTCTTAACCCAGAGTCCGAAAA 1560  
1049 AGTTCAGAGAGGTTTCAGGAGAGGTTGAATGGGCTATATACCTTCGAAAGGCT 1108  
1561 AAGTGGATCATGAATGGATGAGCTGTTGGGAG-----TCTGACCGTCCG 1608  
1109 TGAGTATGAGCTGTTGGACCGACTGAAGTACACTGATGTGTGATTAAGAGACTCTTA 1168  
1609 CTACATGAGACACTGAAGAACTTCGATATCGGAATGTGTTAAGAGAGCCCTTC 1668  
1169 GAATCAACCTCTGTTCCCGAGGATTCAGAGTGCATCAAAACCTTTGAATTCGAATG 1228  
1669 GCCTTTTCTGTTCTTTTCTTTTATTTTGGCCCTAGTGTAGTGAAGATTTGCAAGTGGCAG 1728  
1229 GTTACAAATTCCTTAAGGATGAAGCTATTTACAGTCTGTGACACGACGATGTGG 1288  
1729 GTTACAGAGTCTTAAGAGGACCTGAAGCGCTCATCTCCCTATGATTCACAGAGATC 1788  
1289 CCGAGCTCTTCCAAACAAAGAGAGTTCACCGCGGAGAGATTCATGACGAAGGCTCTG 1348

QY 1444 GTTGGTTACGAGCAGTTCGCAATTGG 1470  
Db 799 CACACCTAGTGAAGAGTTTAAGTGG 825

RESULT 11

US-10-181-108-47  
; Sequence 47, Application US/10181108  
; Publication No. US20040086854A1  
; GENERAL INFORMATION:  
; APPLICANT: INCYTE GENOMICS, INC.  
; APPLICANT: YANG, Juming  
; APPLICANT: BAUGHN, Mariah R.  
; APPLICANT: BURFORD, Neil  
; APPLICANT: AU-YOUNG, Janice  
; APPLICANT: LU, Dyung Aina M.  
; APPLICANT: REDDY, Roopa  
; APPLICANT: RING, Huijun Z.  
; APPLICANT: HILLMAN, Jennifer L.  
; APPLICANT: YUE, Henry  
; APPLICANT: AZIMZAI, Yalda  
; APPLICANT: YAO, Monique G.  
; APPLICANT: GANDHI, Ameena R.  
; APPLICANT: NGUYEN, Damiel B.  
; APPLICANT: BAUGHN, Mariah R.  
; APPLICANT: TANG, Y. Tom  
; APPLICANT: LAL, Preeti  
; APPLICANT: YUE, Henry  
; APPLICANT: BANDMAN, Olga  
; TITLE OF INVENTION: DRUG METABOLIZING ENZYMES  
; FILE REFERENCE: PI-0007 PCT  
; CURRENT APPLICATION NUMBER: US/10/181,108  
; CURRENT FILING DATE: 2002-07-11  
; NUMBER OF SEQ ID NOS: 48  
; SOFTWARE: PERL Program  
; SEQ ID NO 47  
; LENGTH: 866  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc feature  
; OTHER INFORMATION: Incyte ID No: 4109179CB1  
US-10-181-108-47

Query Match 4.2%; Score 77.4; DB 17; Length 866;  
Best Local Similarity 52.7%; Pred. No. 1.7e-11;  
Matches 168; Conservative 0; Mismatches 151; Indels 0; Gaps 0;  
QY 1124 TGGACCAAGCTGAAGTACACTGGATGTGTGATTAAGAGACTCTTAGAATCAACCTCTG 1183  
Db 215 TGAAGAACTTCGATATCGAATGTGTATTAAAGAGACCTTCGCTTTTCTCTCTG 274  
QY 1184 TTCGCGGAGGATTCAGAGTCGCACTCAAAACCTTTGAAATGATGGTTACCAAAATTCCTA 1243  
Db 275 TTCCCTTTATTGGCCCGTAGTGTAGTGAAGTGTGAAGTGGAGGTTACAGAGTTCTAA 334  
QY 1244 AAGGATGAAGCTCATTACAGCATCTGTGACACGACATGTGGCCGAGCTTTTCCAA 1303  
Db 335 AAGGACCTGAAGCGCTCATCTCCCTATGCAATGACAGATCCGAGATATCTCCCA 394  
QY 1304 ACMAAGAGAGTTCCAGCCGAGAGATTCATGAGGAAAGTCTGGAGAGCGGTCCAGGT 1363  
Db 395 ACCCCGAGAGTTCCAGCTGAGCGGTCTTCCCGAGAAATGCAAGGCGGCGCATTCAT 454  
QY 1364 TTAATCAATCCCCTTCGGGAGGAGTCCAGGATGTGTGGCCAAAGAGTTCGCCAAAG 1423  
Db 455 ATGCCCTACGTGCGCTTCTCTGCGCCCGAGAACTGTATAGTCAAAGTTTGTGTGA 514  
QY 1424 TGTACTCAAGATCTTTT 1442  
Db 515 TGAAGAAAGACCAATCT 533

RESULT 12

US-10-142-231-49  
; Sequence 49, Application US/10142231  
; Publication No. US20030077796A1  
; GENERAL INFORMATION:  
; APPLICANT: Croteau, Rodney et al.  
; TITLE OF INVENTION: CYTOCHROME P450 OXYGENASES AND THEIR USES  
; FILE REFERENCE: 62773  
; CURRENT APPLICATION NUMBER: US/10/142,231  
; CURRENT FILING DATE: 2002-05-08  
; PRIOR APPLICATION NUMBER: 60/165,250  
; PRIOR FILING DATE: 1999-11-12  
; NUMBER OF SEQ ID NOS: 95  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 49  
; LENGTH: 1452  
; TYPE: DNA  
; ORGANISM: Taxus cuspidata  
US-10-142-231-49

Query Match 3.9%; Score 73; DB 15; Length 1452;  
Best Local Similarity 43.4%; Pred. No. 4.9e-10;  
Matches 560; Conservative 0; Mismatches 710; Indels 21; Gaps 4;  
QY 217 CTACCGCCAGGTACCATGGCTTGGCGTTTCATTTGAGAAACGCTCCAGCT---GATCTC 273  
Db 118 CTTCACCTGGAAATTTAGGCTTGGCTTTCATTTGGGAGACAATAACATTGGCATCTCAA 177  
QY 274 CAGAGAAGAGTTTCTGGCATCAACCGCAGAAATACGGGTGCACTCTCAAGACGAC 333  
Db 178 CTTCTCAGAAAGTTTAAACGAGAGGGGGAAGAAATTTGGTCTCTTTTCAAGACGTG 237  
QY 334 CTCCTCGGAAACCGACTGTTCAGGTTGATGGGAGCTGATATGTGAGGAGATTTCTGTG 393  
Db 238 CTANTGGGATCCCAAGTTTCTCTGCGCTCTCTCGGAAACCGTTTCTCTCTCC 297  
QY 394 GCGGAACACAAAGCTGGTGTCTTCAGTGGCCAGCATCAGTGAGAACCATCTCGGCTCT 453  
Db 298 AACGAGAAAGCTGGTGGGATGTCTTTGCCCACTCATACATGAATCTCTGGGGAG 357  
QY 454 GACACCTCTCCAAATGTCTCATGGAGTTCAACACAAACAAAGAAAGGCCATTTAGG 513  
Db 358 GATTCCTTCTGGGGAAACCGGACAGGAACATCGGATTTGGCTACCGCACTTAGAGCT 417  
QY 514 GCGTTCTCTCGAGATCTCTGGAGCACTTACATTCGCGTATCCAGCAGAGGTGAAGAGC 573  
Db 418 TTTTGGGCCCCCAAGTTGAGAAATCATGTGGCCAGATGAGTTTCAGACATTCAGCAT 477  
QY 574 GCATACAGGAATGGCTGCMAAAGACTCTCTGCTGCTGTTTATCCAGAAATGAAGAA 633  
Db 478 CACATCAACCAAAATGAAGGGGAATGATGAAGTGAAGGTCTTCTCTGTATAGGAAC 537  
QY 634 CTCATGTTTCGGATAGTATGAAATCTGCTTGGTTTGAACACAGAGCAAAATAAGAGC 693  
Db 538 CTTGTCTTCTCCATGCAACAGCTTGTTCGTTATTAACGATGAGACCAACAGGAG 597  
QY 694 GAGCAGCAAGAACTGGTGGAGCTTTTGAAGAAATGATCAAAACCTTGTCTCTTGA 753  
Db 598 CGACTTCATCTCTTTTGGAACTATG-----TAATGGAGCTGTGTGTAATCCG 648  
QY 754 ATCGAGTTTCTTTCAGTGTGTGTACAGGGTTTGGGGCAGCAATTTTCATTCATCTCC 813  
Db 649 CTGCTCTTCCAGGATCTGTTTCTGTAAGCGCTTCAGGCAGCTTCGGAGCTCGATGA 708  
QY 814 AAATTCAGGAACATCAGGAAGAAATTCAGATGACCAATGAAAGAAACGACAGAAA 873  
Db 709 ATTCTCATTTTAAATGAAATCAGAGAGCGATCTCGGTTTCAGGCGAGCTTCAAGC 768  
QY 874 TACAAGAGCGCTTCAGCTGTTGATCGAGAAACAGCAGAAAGATGACGAACCTTTAGT 933  
Db 769 AACCNAGATCTACTCTGGTGTGCTCACCTTCAAAGATGAAGAGAAATCCATTGACA 828



```

/ APPLICANT: Edgerton, Michael D
/ APPLICANT: Chomet, Paul S.
/ APPLICANT: Adams, Thomas H
/ APPLICANT: Ruff, Thomas G.
/ APPLICANT: Agarwal, Ameeta K.
/ APPLICANT: Ahrens, Jeffrey E.
/ APPLICANT: Ball, James A.
/ APPLICANT: Banu, G.
/ APPLICANT: Bell, Erin
/ APPLICANT: Boddupalli, Raghava
/ APPLICANT: Deikman, Jill
/ APPLICANT: Deng, Molian
/ APPLICANT: Dong, Jinzhao
/ APPLICANT: Duff, Stephen M.
/ APPLICANT: Galligan, Meghan M.
/ APPLICANT: Hinchey, Brenda S.
/ APPLICANT: Huang, Shihshieh
/ APPLICANT: Johnson, G. Richard
/ APPLICANT: Jung, Vincent
/ APPLICANT: Kretzmer, Keith A
/ APPLICANT: Laccetti, Lucille B.
/ APPLICANT: Lai, Chao-Qiang
/ APPLICANT: Lee, Gary
/ APPLICANT: Lin, Jie-Yi
/ APPLICANT: Liu, Jingdong
/ APPLICANT: Lu, Bin
/ APPLICANT: Luethy, Michael M.
/ APPLICANT: Lund, Adrian
/ APPLICANT: Madson, Linda L.
/ APPLICANT: Malloy, Kathleen A.
/ APPLICANT: McKiel, Christine L.
/ APPLICANT: Miller, Philip W.
/ APPLICANT: Padmavathi, Manchikanti
/ APPLICANT: Parnell, Laurence D.
/ APPLICANT: Start, William G.
/ APPLICANT: Tennesen, Dan
/ APPLICANT: Vidya, K.R.
/ APPLICANT: Wang, Haiyun
/ APPLICANT: Xin, Zhanguo
/ APPLICANT: Xu, Nanfei
/ APPLICANT: Yang, Chunzhi
/ APPLICANT: Zeng, Xiaoping
/ APPLICANT: Zhang, Qiang
/ APPLICANT: Zhao, Yajuan
/ APPLICANT: Zhou, Li
/ TITLE OF INVENTION: Gene Sequences and Uses Thereof in Plants
/ FILE REFERENCE: 38-15(52796)B
/ CURRENT APPLICATION NUMBER: US/10/310,154
/ PRIOR FILING DATE: 2002-12-04
/ PRIOR APPLICATION NUMBER: 60/337,358
/ PRIOR FILING DATE: 2001-12-04
/ NUMBER OF SEQ ID NOS: 736
/ SEQ ID NO 13
/ LENGTH: 1925
/ TYPE: DNA
/ ORGANISM: Zea mays
/ FEATURE:
/ NAME/KEY: CDS
/ LOCATION: (29)..(1495)
/ OTHER INFORMATION:
/ US-10-310-154-13

Query Match 3.8%; Score 70.6; DB 16; Length 1925;
Best Local Similarity 47.4%; Pred. No. 3.1e-09;
Matches 245; Conservative 0; Mismatches 269; Indels 3; Gaps 1;

QY 968 TATTGGAGGTCATGAACACCGCCGACCTGCAACCTTCACCTTGTCATGCTTTCTGGGTC 1027
Db 897 TGTTCGCGAGCCATGAGAGAGCTCCATGGTATTACCGTCATACTCAAGTACTGACTG 956
QY 1028 TGAACACAGAGTGGTGCAGAAAGGTCAGAGAGGAGGTTTCAGAGAGGTTGAAATGGCA 1087
Db 957 ACACCCAAAGGCTTTCAGAGAGCTGACAGAGGAGCAGAAAGAAATCTCGAAA--GTA 1013

```

Mon May 24 14:04:27 2004

QY	1088	TGTATACACCTGGAAAGGCTT	GAGTATGGAGCTGTTGGACCAGCTGAGTACACTGGAT	1147
Db	1014	GGCCGATCCAGGCTCTGACCT	CAGTGGAGGAGTACAGGTCTATGAAATTCACATCTC	1073
QY	1148	GTGTGATTAAGAGACTCTT	TAGAAATCAACCTCTCTGTTCCGGAGGATTCAGAGTCGCAC	1207
Db	1074	ATGTTATACATGAGTCGCT	TAAAGCTCGCAACATCGCACTGGCCATGTTTACGGAAGCAA	1133
QY	1208	TCBAACCTTTGAAATTCGAAT	GTACCAATTCCTAAGGATGGAACTCATTTACAGCA	1267
Db	1134	ATCAGATGTCACATTAAT	TGGGTACAAATTCBAAGGATCAAGATCATGATGTG	1193
QY	1268	TCTGTGACACGACGATG	TGGCCGACGCTTTTCCAAACAAAGAGGTTCCAGCCGGAGA	1327
Db	1194	CAC TAGCATCGCACTT	GAATACGGAGGTCTACGAGGACCCCTCAGTGTCAATCCATGGA	1253
QY	1328	GATTCAAGAGCAAGGCT	CTGGAGGCGGTCCAGGTTTAACTACATCCCTTCGGAGGAG	1387
Db	1254	GATGGAAGGATATTCCT	GAACCAAGTCGGCACCTCTAAGGACTTTATGGCCTTCGGGGTG	1313
QY	1388	GATCCAGGATGTGTG	GGCAAGAGTTCGCCAAAGTGTACCTCAAGATCTTTTATGTTG	1447
Db	1314	GTTCGCCCTATGCGCT	GGTCCGAGTTTCCAGATGCGAGATGCTATGTTCTCCTCATT	1373
QY	1448	AGTTACGACGACGAT	TGCAATTTGGAATTCCTCAACGG	1484
Db	1374	ACTTGGTCAAAATTAC	AGCTGGAAACCGGTCAGCGG	1410

Search completed: May 22, 2004, 19:33:16  
Job time : 599 secs